

TABLE 1

```

HEADER      HYDROLASE                      17-APR-00    1EUV
TITLE       X-RAY STRUCTURE OF THE C-TERMINAL ULP1 PROTEASE DOMAIN IN
TITLE       2 COMPLEX WITH SMT3, THE YEAST ORTHOLOG OF SUMO.
COMPND      MOL ID: 1;
COMPND      2 MOLECULE: ULP1 PROTEASE;
COMPND      3 CHAIN: A;
COMPND      4 FRAGMENT: C-TERMINAL PROTEASE DOMAIN;
COMPND      5 ENGINEERED: YES;
COMPND      6 MOL ID: 2;
COMPND      7 MOLECULE: UBITQUTIN-LIKE PROTEIN SMT3;
COMPND      8 CHAIN: B;
COMPND      9 FRAGMENT: SMT3 RESIDUES 13-98;
COMPND     10 ENGINEERED: YES
SOURCE      MOL ID: 1;
SOURCE      2 ORGANISM_SCIENTIFIC: SACCHAROMYCES CEREVISIAE;
SOURCE      3 ORGANISM_COMMON: YEAST;
SOURCE      4 EXPRESSION_SYSTEM: ESCHERICHIA COLI;
SOURCE      5 EXPRESSION_SYSTEM_COMMON: BACTERIA;
SOURCE      6 EXPRESSION_SYSTEM_PLASMID: PET28B;
SOURCE      7 MOL ID: 2;
SOURCE      8 ORGANISM_SCIENTIFIC: SACCHAROMYCES CEREVISIAE;
SOURCE      9 ORGANISM_COMMON: YEAST;
SOURCE     10 EXPRESSION_SYSTEM: ESCHERICHIA COLI;
SOURCE     11 EXPRESSION_SYSTEM_COMMON: BACTERIA;
SOURCE     12 EXPRESSION_SYSTEM_PLASMID: PET28B
KEYWDS      SUMO HYDROLASE, UBIQUITIN-LIKE PROTEASE 1, SMT3 HYDROLASE
KEYWDS      2 DESUMOYLATING ENZYME, CYSTEINE PROTEASE, SUMO PROCESSING
KEYWDS      3 ENZYME, SMT3 PROCESSING ENZYME, NABH4, THIOHEMIACETAL,
KEYWDS      4 COVALENT PROTEASE ADDUCT
EXPDTA      X-RAY DIFFRACTION
AUTHOR      E.MOSSESSOVA,C.D.LIMA
REVSTAT     1  07-JUN-00 1EUV    0
JRNL        AUTH  E.MOSSESSOVA,C.D.LIMA
JRNL        TITL  ULP1-SUMO CRYSTAL STRUCTURE AND GENETIC ANALYSIS
JRNL        TITL 2 REVEAL CONSERVED INTERACTIONS AND A REGULATORY
JRNL        TITL 3 ELEMENT ESSENTIAL FOR CELL GROWTH IN YEAST
JRNL        REF   MOL. CELL                      V.    5    865 2000
JRNL        REFN  ASTM MOCEFL  US ISSN 1097-2765
REMARK      1
REMARK      1 REFERENCE 1
REMARK      1 AUTH  S.J.LI,M.HOCHSTRASSER
REMARK      1 TITL  A NEW PROTEASE REQUIRED FOR CELL-CYCLE PROGRESSION
REMARK      1 TITL 2 IN YEAST.
REMARK      1 REF   NATURE                      V. 398    246 1999
REMARK      1 REFN  ASTM NATUAS  UK ISSN 0028-0836
REMARK      2
REMARK      2 RESOLUTION. 1.6 ANGSTROMS.
REMARK      3
REMARK      3 REFINEMENT.
REMARK      3 PROGRAM      : REFMAC
REMARK      3 AUTHORS      : MURSHUDOV,VAGIN,DODSON
REMARK      3
REMARK      3 DATA USED IN REFINEMENT.
REMARK      3 RESOLUTION RANGE HIGH (ANGSTROMS) : 1.60
REMARK      3 RESOLUTION RANGE LOW  (ANGSTROMS) : 25.0
REMARK      3 DATA CUTOFF          (SIGMA(F)) : 1.000
REMARK      3 COMPLETENESS FOR RANGE          (%) : 96.6
REMARK      3 NUMBER OF REFLECTIONS              : 47560
REMARK      3
REMARK      3 FIT TO DATA USED IN REFINEMENT.

```

2025 RELEASE UNDER E.O. 14176

REMARK 3 CROSS-VALIDATION METHOD : NULL
 REMARK 3 FREE R VALUE TEST SET SELECTION : 5% OF THE OBSERVED
 REMARK 3 DATA
 REMARK 3 R VALUE (WORKING + TEST SET) : 0.193
 REMARK 3 R VALUE (WORKING SET) : 0.190
 REMARK 3 FREE R VALUE : 0.251
 REMARK 3 FREE R VALUE TEST SET SIZE (%) : NULL
 REMARK 3 FREE R VALUE TEST SET COUNT : 2378
 REMARK 3
 REMARK 3 NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
 REMARK 3 PROTEIN ATOMS : 2417
 REMARK 3 NUCLEIC ACID ATOMS : 0
 REMARK 3 HETEROGEN ATOMS : 0
 REMARK 3 SOLVENT ATOMS : 432
 REMARK 3
 REMARK 3 B VALUES.
 REMARK 3 FROM WILSON PLOT (A**2) : 20.69
 REMARK 3 MEAN B VALUE (OVERALL, A**2) : NULL
 REMARK 3 OVERALL ANISOTROPIC B VALUE.
 REMARK 3 B11 (A**2) : NULL
 REMARK 3 B22 (A**2) : NULL
 REMARK 3 B33 (A**2) : NULL
 REMARK 3 B12 (A**2) : NULL
 REMARK 3 B13 (A**2) : NULL
 REMARK 3 B23 (A**2) : NULL
 REMARK 3
 REMARK 3 ESTIMATED OVERALL COORDINATE ERROR.
 REMARK 3 ESU BASED ON R VALUE (A) : NULL
 REMARK 3 ESU BASED ON FREE R VALUE (A) : NULL
 REMARK 3 ESU BASED ON MAXIMUM LIKELIHOOD (A) : NULL
 REMARK 3 ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2) : NULL
 REMARK 3
 REMARK 3 RMS DEVIATIONS FROM IDEAL VALUES.
 REMARK 3 DISTANCE RESTRAINTS. RMS SIGMA
 REMARK 3 BOND LENGTH (A) : 0.013 ; NULL
 REMARK 3 ANGLE DISTANCE (A) : 1.600 ; NULL
 REMARK 3 INTRAPLANAR 1-4 DISTANCE (A) : NULL ; NULL
 REMARK 3 H-BOND OR METAL COORDINATION (A) : NULL ; NULL
 REMARK 3
 REMARK 3 PLANE RESTRAINT (A) : NULL ; NULL
 REMARK 3 CHIRAL-CENTER RESTRAINT (A**3) : NULL ; NULL
 REMARK 3
 REMARK 3 NON-BONDED CONTACT RESTRAINTS.
 REMARK 3 SINGLE TORSION (A) : NULL ; NULL
 REMARK 3 MULTIPLE TORSION (A) : NULL ; NULL
 REMARK 3 H-BOND (X...Y) (A) : NULL ; NULL
 REMARK 3 H-BOND (X-H...Y) (A) : NULL ; NULL
 REMARK 3
 REMARK 3 CONFORMATIONAL TORSION ANGLE RESTRAINTS.
 REMARK 3 SPECIFIED (DEGREES) : NULL ; NULL
 REMARK 3 PLANAR (DEGREES) : NULL ; NULL
 REMARK 3 STAGGERED (DEGREES) : NULL ; NULL
 REMARK 3 TRANSVERSE (DEGREES) : NULL ; NULL
 REMARK 3
 REMARK 3 ISOTROPIC THERMAL FACTOR RESTRAINTS. RMS SIGMA
 REMARK 3 MAIN-CHAIN BOND (A**2) : NULL ; NULL
 REMARK 3 MAIN-CHAIN ANGLE (A**2) : NULL ; NULL
 REMARK 3 SIDE-CHAIN BOND (A**2) : NULL ; NULL
 REMARK 3 SIDE-CHAIN ANGLE (A**2) : NULL ; NULL
 REMARK 3
 REMARK 3 OTHER REFINEMENT REMARKS: USED A -LOGLIKELIHOOD RESIDUAL
 REMARK 3 DERIVED FROM RICE DISTRIBUTION FOR CENTRIC AND ACENTRIC
 REMARK 3 CASES OF FS SPARSE MATRIX PROCEDURE WITH ANISOTROPIC B-
 REMARK 3 FACTOR REFINEMENT.

REMARK 4
 REMARK 4 1EUV COMPLIES WITH FORMAT V. 2.3, 09-JULY-1998
 REMARK 6
 REMARK 6 COVALENT ADDUCT FORMED BETWEEN THE PROTEOLYTIC
 REMARK 6 ACTIVE SITE THIOL AND THE C-TERMINAL GLYCINE OF
 REMARK 6 SMT3 USING THE REDUCING AGENT NABH4.
 REMARK 100
 REMARK 100 THIS ENTRY HAS BEEN PROCESSED BY RCSB ON 20-APR-2000
 REMARK 100 THE RCSB ID CODE IS RCSB010911.
 REMARK 200
 REMARK 200 EXPERIMENTAL DETAILS
 REMARK 200 EXPERIMENT TYPE : X-RAY DIFFRACTION
 REMARK 200 DATE OF DATA COLLECTION : 21-OCT-1999
 REMARK 200 TEMPERATURE (KELVIN) : 100.0
 REMARK 200 PH : 6.50
 REMARK 200 NUMBER OF CRYSTALS USED : 1
 REMARK 200
 REMARK 200 SYNCHROTRON (Y/N) : Y
 REMARK 200 RADIATION SOURCE : NSLS
 REMARK 200 BEAMLINE : X4A
 REMARK 200 X-RAY GENERATOR MODEL : NULL
 REMARK 200 MONOCHROMATIC OR LAUE (M/L) : M
 REMARK 200 WAVELENGTH OR RANGE (A) : 0.9791
 REMARK 200 MONOCHROMATOR : NULL
 REMARK 200 OPTICS : NULL
 REMARK 200
 REMARK 200 DETECTOR TYPE : CCD
 REMARK 200 DETECTOR MANUFACTURER : ADSC QUANTUM 4
 REMARK 200 INTENSITY-INTEGRATION SOFTWARE : DENZO
 REMARK 200 DATA SCALING SOFTWARE : SCALEPACK
 REMARK 200
 REMARK 200 NUMBER OF UNIQUE REFLECTIONS : 47875
 REMARK 200 RESOLUTION RANGE HIGH (A) : 1.600
 REMARK 200 RESOLUTION RANGE LOW (A) : 25.000
 REMARK 200 REJECTION CRITERIA (SIGMA(I)) : 0.000
 REMARK 200
 REMARK 200 OVERALL.
 REMARK 200 COMPLETENESS FOR RANGE (%) : 96.6
 REMARK 200 DATA REDUNDANCY : 9.400
 REMARK 200 R MERGE (I) : 0.04300
 REMARK 200 R SYM (I) : NULL
 REMARK 200 <I/SIGMA(I)> FOR THE DATA SET : 16.4000
 REMARK 200
 REMARK 200 IN THE HIGHEST RESOLUTION SHELL.
 REMARK 200 HIGHEST RESOLUTION SHELL, RANGE HIGH (A) : 1.60
 REMARK 200 HIGHEST RESOLUTION SHELL, RANGE LOW (A) : 1.66
 REMARK 200 COMPLETENESS FOR SHELL (%) : 86.0
 REMARK 200 DATA REDUNDANCY IN SHELL : 4.30
 REMARK 200 R MERGE FOR SHELL (I) : 0.29000
 REMARK 200 R SYM FOR SHELL (I) : NULL
 REMARK 200 <I/SIGMA(I)> FOR SHELL : NULL
 REMARK 200
 REMARK 200 DIFFRACTION PROTOCOL: SINGLE WAVELENGTH
 REMARK 200 METHOD USED TO DETERMINE THE STRUCTURE: NULL
 REMARK 200 SOFTWARE USED: SHARP
 REMARK 200 STARTING MODEL: NULL
 REMARK 200
 REMARK 200 REMARK: NULL
 REMARK 280
 REMARK 280 CRYSTAL
 REMARK 280 SOLVENT CONTENT, VS (%): NULL
 REMARK 280 MATTHEWS COEFFICIENT, VM (ANGSTROMS**3/DA): NULL
 REMARK 280
 REMARK 280 CRYSTALLIZATION CONDITIONS: 0.1M MES PH6.5, 10% W/V

REMARK 280 POLYETHYLENE GLYCOL 20000, 3% W/V 1,6-HEXANDIOL
 REMARK 290
 REMARK 290 CRYSTALLOGRAPHIC SYMMETRY
 REMARK 290 SYMMETRY OPERATORS FOR SPACE GROUP: P 21 21 2
 REMARK 290
 REMARK 290 SYMOP SYMMETRY
 REMARK 290 NNNMMM OPERATOR
 REMARK 290 1555 X,Y,Z
 REMARK 290 2555 -X,-Y,Z
 REMARK 290 3555 1/2-X,1/2+Y,-Z
 REMARK 290 4555 1/2+X,1/2-Y,-Z
 REMARK 290
 REMARK 290 WHERE NNN -> OPERATOR NUMBER
 REMARK 290 MMM -> TRANSLATION VECTOR
 REMARK 290
 REMARK 290 CRYSTALLOGRAPHIC SYMMETRY TRANSFORMATIONS
 REMARK 290 THE FOLLOWING TRANSFORMATIONS OPERATE ON THE ATOM/HETATM
 REMARK 290 RECORDS IN THIS ENTRY TO PRODUCE CRYSTALLOGRAPHICALLY
 REMARK 290 RELATED MOLECULES.
 REMARK 290 SMTRY1 1 1.000000 0.000000 0.000000 0.000000
 REMARK 290 SMTRY2 1 0.000000 1.000000 0.000000 0.000000
 REMARK 290 SMTRY3 1 0.000000 0.000000 1.000000 0.000000
 REMARK 290 SMTRY1 2 -1.000000 0.000000 0.000000 0.000000
 REMARK 290 SMTRY2 2 0.000000 -1.000000 0.000000 0.000000
 REMARK 290 SMTRY3 2 0.000000 0.000000 1.000000 0.000000
 REMARK 290 SMTRY1 3 -1.000000 0.000000 0.000000 62.88700
 REMARK 290 SMTRY2 3 0.000000 1.000000 0.000000 26.58350
 REMARK 290 SMTRY3 3 0.000000 0.000000 -1.000000 0.000000
 REMARK 290 SMTRY1 4 1.000000 0.000000 0.000000 62.88700
 REMARK 290 SMTRY2 4 0.000000 -1.000000 0.000000 26.58350
 REMARK 290 SMTRY3 4 0.000000 0.000000 -1.000000 0.000000
 REMARK 290
 REMARK 290 REMARK: NULL
 REMARK 300
 REMARK 300 BIOMOLECULE: 1
 REMARK 300 THIS ENTRY CONTAINS THE CRYSTALLOGRAPHIC ASYMMETRIC UNIT
 REMARK 300 WHICH CONSISTS OF 2 CHAIN(S). SEE REMARK 350 FOR
 REMARK 300 INFORMATION ON GENERATING THE BIOLOGICAL MOLECULE(S).
 REMARK 350
 REMARK 350 GENERATING THE BIOMOLECULE
 REMARK 350 COORDINATES FOR A COMPLETE MULTIMER REPRESENTING THE KNOWN
 REMARK 350 BIOLOGICALLY SIGNIFICANT OLIGOMERIZATION STATE OF THE
 REMARK 350 MOLECULE CAN BE GENERATED BY APPLYING BIOMT TRANSFORMATIONS
 REMARK 350 GIVEN BELOW. BOTH NON-CRYSTALLOGRAPHIC AND
 REMARK 350 CRYSTALLOGRAPHIC OPERATIONS ARE GIVEN.
 REMARK 350
 REMARK 350 BIOMOLECULE: 1
 REMARK 350 APPLY THE FOLLOWING TO CHAINS: A, B
 REMARK 350 BIOMT1 1 1.000000 0.000000 0.000000 0.000000
 REMARK 350 BIOMT2 1 0.000000 1.000000 0.000000 0.000000
 REMARK 350 BIOMT3 1 0.000000 0.000000 1.000000 0.000000
 REMARK 465
 REMARK 465 MISSING RESIDUES
 REMARK 465 THE FOLLOWING RESIDUES WERE NOT LOCATED IN THE
 REMARK 465 EXPERIMENT. (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
 REMARK 465 IDENTIFIER; SSSEQ=SEQUENCE NUMBER; I=INSERTION CODE.)
 REMARK 465
 REMARK 465 M RES C SSSEQI
 REMARK 465 GLU B 13
 REMARK 465 VAL B 14
 REMARK 465 LYS B 15
 REMARK 465 PRO B 16
 REMARK 465 GLU B 17
 REMARK 465 VAL B 18

REMARK 465 LYS B 19
 REMARK 470
 REMARK 470 MISSING ATOM
 REMARK 470 THE FOLLOWING RESIDUES HAVE MISSING ATOMS (M=MODEL NUMBER;
 REMARK 470 RES=RESIDUE NAME; C=CHAIN IDENTIFIER; SSEQ=SEQUENCE NUMBER;
 REMARK 470 I=INSERTION CODE):
 REMARK 470 M RES CSSEQI ATOMS
 REMARK 470 PRO B 20 CB CG CD
 REMARK 470 GLU B 21 CB CG CD OE1 OE2
 REMARK 470 LYS B 54 CG CD CE NZ
 REMARK 470 GLU B 59 CG CD OE1 OE2
 REMARK 470 ASP B 75 CB CG OD1 OD2
 REMARK 470 GLU B 84 CG CD OE1 OE2
 REMARK 500
 REMARK 500 GEOMETRY AND STEREOCHEMISTRY
 REMARK 500 SUBTOPIC: CLOSE CONTACTS IN SAME ASYMMETRIC UNIT
 REMARK 500
 REMARK 500 THE FOLLOWING ATOMS ARE IN CLOSE CONTACT.
 REMARK 500

REMARK 500	ATM1	RES C	SSEQI	ATM2	RES C	SSEQI		
REMARK 500	NE	ARG A	422	O	HOH	377	1.12	
REMARK 500	CD	ARG A	422	O	HOH	377	2.02	REMARK
500 O	HOH	272	NE	ARG A	422		2.14	
REMARK 500	CZ	ARG A	422	O	HOH	377	2.17	
REMARK 500	O	HOH	457	O	HOH	718	2.17	REMARK

500
 REMARK 500 GEOMETRY AND STEREOCHEMISTRY
 REMARK 500 SUBTOPIC: CLOSE CONTACTS
 REMARK 500
 REMARK 500 THE FOLLOWING ATOMS THAT ARE RELATED BY CRYSTALLOGRAPHIC
 REMARK 500 SYMMETRY ARE IN CLOSE CONTACT. AN ATOM LOCATED WITHIN 0.15
 REMARK 500 ANGSTROMS OF A SYMMETRY RELATED ATOM IS ASSUMED TO BE ON A
 REMARK 500 SPECIAL POSITION AND IS, THEREFORE, LISTED IN REMARK 375
 REMARK 500 INSTEAD OF REMARK 500. ATOMS WITH NON-BLANK ALTERNATE
 REMARK 500 LOCATION INDICATORS ARE NOT INCLUDED IN THE CALCULATIONS.
 REMARK 500
 REMARK 500 DISTANCE CUTOFF:
 REMARK 500 2.2 ANGSTROMS FOR CONTACTS NOT INVOLVING HYDROGEN ATOMS
 REMARK 500 1.6 ANGSTROMS FOR CONTACTS INVOLVING HYDROGEN ATOMS
 REMARK 500

REMARK 500	ATM1	RES C	SSEQI	ATM2	RES C	SSEQI	SSYMOP	DISTANCE
REMARK 500	O	HOH	419	O	HOH	4	3558	1.28
REMARK 500	O	HOH	426	O	HOH	4	3558	1.62
REMARK 500	O	HOH	61	O	HOH	473	3558	1.68
REMARK 500	O	HOH	578	O	HOH	49	3548	2.07
REMARK 500	O	HOH	578	O	HOH	21	3548	2.18
REMARK 500	O	HOH	24	O	HOH	473	3558	2.18

REMARK 500
 REMARK 500 GEOMETRY AND STEREOCHEMISTRY
 REMARK 500 SUBTOPIC: COVALENT BOND LENGTHS
 REMARK 500
 REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
 REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE REMARK 500 THAN 6*
 REMARK 500 (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
 REMARK 500
 REMARK 500 STANDARD TABLE:
 REMARK 500 FORMAT: (10X,I3,1X,2(A3,1X,A1,I4,A1,1X,A4,3X),F6.3)
 REMARK 500
 REMARK 500 EXPECTED VALUES: ENGH AND HUBER, 1991
 REMARK 500

REMARK 500	M RES CSSEQI	ATM1	RES CSSEQI	ATM2	DEVIATION
REMARK 500	ARG A 422	CB	ARG A 422	CA	-0.335
REMARK 500	GLY B 98	O	GLY B 98	C	0.125

REMARK 500
 REMARK 500 GEOMETRY AND STEREOCHEMISTRY
 REMARK 500 SUBTOPIC: COVALENT BOND ANGLES
 REMARK 500
 REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
 REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE
 REMARK 500 THAN 6*RMSD (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
 REMARK 500 IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
 REMARK 500
 REMARK 500 STANDARD TABLE:
 REMARK 500 FORMAT: (10X,I3,1X,A3,1X,A1,I4,A1,3(1X,A4,2X),12X,F5.1)
 REMARK 500
 REMARK 500 EXPECTED VALUES: ENGH AND HUBER, 1991
 REMARK 500
 REMARK 500 M RES CSSEQI ATM1 ATM2 ATM3
 REMARK 500 ARG A 422 CB - CA - C ANGL. DEV. = 21.6 DEGREES
 REMARK 500 GLU A 423 CB - CG - CD ANGL. DEV. = 27.4 DEGREES
 REMARK 500
 REMARK 500 GEOMETRY AND STEREOCHEMISTRY
 REMARK 500 SUBTOPIC: TORSION ANGLES
 REMARK 500
 REMARK 500 TORSION ANGLES OUTSIDE THE EXPECTED RAMACHANDRAN REGIONS:
 REMARK 500 (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN IDENTIFIER;
 REMARK 500 SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
 REMARK 500
 REMARK 500 STANDARD TABLE:
 REMARK 500 FORMAT: (10X,I3,1X,A3,1X,A1,I4,A1,4X,F7.2,3X,F7.2)
 REMARK 500
 REMARK 500 M RES CSSEQI PSI PHI
 REMARK 500 GLU A 423 112.62 151.65
 REMARK 525
 REMARK 525 SOLVENT
 REMARK 525 THE FOLLOWING SOLVENT MOLECULES LIE FARTHER THAN EXPECTED
 REMARK 525 FROM THE PROTEIN OR NUCLEIC ACID MOLECULE AND MAY BE
 REMARK 525 ASSOCIATED WITH A SYMMETRY RELATED MOLECULE (M=MODEL REMARK 525 NUMBER;
 RES=RESIDUE NAME; C=CHAIN IDENTIFIER; SSEQ=SEQUENCE REMARK 525 NUMBER; I=INSERTION CODE):
 REMARK 525
 REMARK 525
 REMARK 525 M RES CSSEQI
 REMARK 525 0 HOH 322 DISTANCE = 6.11 ANGSTROMS
 REMARK 525 0 HOH 420 DISTANCE = 6.85 ANGSTROMS
 REMARK 525 0 HOH 457 DISTANCE = 7.05 ANGSTROMS
 REMARK 525 0 HOH 544 DISTANCE = 7.02 ANGSTROMS
 REMARK 525 0 HOH 627 DISTANCE = 7.46 ANGSTROMS
 REMARK 525 0 HOH 673 DISTANCE = 8.63 ANGSTROMS
 REMARK 525 0 HOH 718 DISTANCE = 5.47 ANGSTROMS
 REMARK 525 0 HOH 746 DISTANCE = 5.09 ANGSTROMS
 REMARK 999
 REMARK 999 SEQUENCE
 REMARK 999 RESIDUES 13-19 OF CHAIN B WERE NOT SEEN IN THE ELECTRON
 REMARK 999 DENSITY.
 REMARK 999 THE SIDE CHAINS OF RESIDUES 20, 21, 54, 59, 75, AND 84
 REMARK 999 IN CHAIN B WERE NOT SEEN IN THE ELECTRON DENSITY.
 DBREF 1EUV A 401 621 GB 1039457 AAB68167 401 621
 DBREF 1EUV B 13 98 SWS Q12306 SMT3 YEAST 13 98
 SEQADV 1EUV GLY A 401 GB 1039457 LYS 401 CLONING ARTIFACTS
 SEQADV 1EUV SER A 402 GB 1039457 LYS 402 CLONING ARTIFACTS
 SEQRES 1 A 221 GLY SER LEU VAL PRO GLU LEU ASN GLU LYS ASP ASP ASP
 SEQRES 2 A 221 GLN VAL GLN LYS ALA LEU ALA SER ARG GLU ASN THR GLN
 SEQRES 3 A 221 LEU MET ASN ARG ASP ASN ILE GLU ILE THR VAL ARG ASP
 SEQRES 4 A 221 PHE LYS THR LEU ALA PRO ARG ARG TRP LEU ASN ASP THR
 SEQRES 5 A 221 ILE ILE GLU PHE PHE MET LYS TYR ILE GLU LYS SER THR
 SEQRES 6 A 221 PRO ASN THR VAL ALA PHE ASN SER PHE PHE TYR THR ASN
 SEQRES 7 A 221 LEU SER GLU ARG GLY TYR GLN GLY VAL ARG ARG TRP MET

ANISOU	7	C	SER A 402	3621	3603	3750	118	-167	272	C
ATOM	8	O	SER A 402	34.398	17.833	87.545	1.00	30.31		O
ANISOU	8	O	SER A 402	3857	3763	3896	281	-148	218	O
ATOM	9	CB	SER A 402	34.236	20.759	88.859	1.00	30.60		C
ANISOU	9	CB	SER A 402	3984	3744	3898	194	-217	195	C
ATOM	10	OG	SER A 402	33.428	21.458	87.901	1.00	28.46		O
ANISOU	10	OG	SER A 402	3763	3367	3684	85	-148	70	O
ATOM	11	N	LEU A 403	32.358	18.715	87.232	1.00	24.48		N
ANISOU	11	N	LEU A 403	3228	2729	3344	20	-68	91	N
ATOM	12	CA	LEU A 403	32.156	18.045	85.960	1.00	22.66		C
ANISOU	12	CA	LEU A 403	2907	2577	3127	65	11	223	C
ATOM	13	C	LEU A 403	32.648	18.911	84.813	1.00	21.40		C
ANISOU	13	C	LEU A 403	2696	2438	2996	85	-85	152	C
ATOM	14	O	LEU A 403	32.533	18.491	83.671	1.00	21.43		O
ANISOU	14	O	LEU A 403	3033	2035	3075	125	44	179	O
ATOM	15	CB	LEU A 403	30.654	17.761	85.763	1.00	21.94		C
ANISOU	15	CB	LEU A 403	2866	2470	3000	15	85	214	C
ATOM	16	CG	LEU A 403	30.070	16.687	86.706	1.00	22.13		C
ANISOU	16	CG	LEU A 403	2787	2618	3003	68	171	266	C
ATOM	17	CD1	LEU A 403	28.607	16.437	86.413	1.00	23.95		C
ANISOU	17	CD1	LEU A 403	3074	2778	3249	-32	-70	20	C
ATOM	18	CD2	LEU A 403	30.897	15.404	86.513	1.00	23.40		C
ANISOU	18	CD2	LEU A 403	3198	2409	3283	-36	69	60	C
ATOM	19	N	VAL A 404	33.143	20.116	85.092	1.00	22.43		N
ANISOU	19	N	VAL A 404	2884	2486	3153	114	-106	152	N
ATOM	20	CA	VAL A 404	33.683	20.963	84.021	1.00	22.06		C
ANISOU	20	CA	VAL A 404	2880	2453	3050	80	-22	91	C
ATOM	21	C	VAL A 404	35.197	20.906	84.138	1.00	22.63		C
ANISOU	21	C	VAL A 404	3081	2515	3001	138	-108	249	C
ATOM	22	O	VAL A 404	35.785	21.433	85.067	1.00	24.07		O
ANISOU	22	O	VAL A 404	2846	3020	3279	128	-221	178	O
ATOM	23	CB	VAL A 404	33.147	22.416	84.244	1.00	21.98		C
ANISOU	23	CB	VAL A 404	2895	2505	2951	158	-13	131	C
ATOM	24	CG1	VAL A 404	33.678	23.330	83.137	1.00	21.57		C
ANISOU	24	CG1	VAL A 404	2633	2638	2926	59	-25	132	C
ATOM	25	CG2	VAL A 404	31.636	22.469	84.333	1.00	20.47		C
ANISOU	25	CG2	VAL A 404	2813	2171	2794	-47	-76	44	C
ATOM	26	N	PRO A 405	35.860	20.317	83.172	1.00	23.66		N
ANISOU	26	N	PRO A 405	3008	2745	3235	89	31	168	N
ATOM	27	CA	PRO A 405	37.313	20.171	83.266	1.00	26.77		C
ANISOU	27	CA	PRO A 405	3176	3461	3535	116	-32	99	C
ATOM	28	C	PRO A 405	38.073	21.419	82.867	1.00	30.16		C
ANISOU	28	C	PRO A 405	3742	3725	3992	-99	-6	186	C
ATOM	29	O	PRO A 405	37.569	22.254	82.115	1.00	31.05		O
ANISOU	29	O	PRO A 405	3572	4012	4213	133	-42	218	O
ATOM	30	CB	PRO A 405	37.602	19.013	82.310	1.00	27.12		C
ANISOU	30	CB	PRO A 405	3320	3480	3506	35	-40	78	C
ATOM	31	CG	PRO A 405	36.575	19.165	81.253	1.00	26.08		C
ANISOU	31	CG	PRO A 405	3445	3222	3241	76	27	100	C
ATOM	32	CD	PRO A 405	35.322	19.665	81.962	1.00	24.17		C
ANISOU	32	CD	PRO A 405	3120	2926	3135	87	-29	248	C
ATOM	33	N	GLU A 406	39.331	21.452	83.308	1.00	32.15		N
ANISOU	33	N	GLU A 406	3743	4267	4205	62	-82	84	N
ATOM	34	CA	GLU A 406	40.213	22.546	82.896	1.00	34.41		C
ANISOU	34	CA	GLU A 406	4328	4297	4449	-26	60	111	C
ATOM	35	C	GLU A 406	40.962	22.009	81.678	1.00	33.20		C
ANISOU	35	C	GLU A 406	4044	4240	4329	-11	-78	122	C
ATOM	36	O	GLU A 406	41.302	20.813	81.564	1.00	34.60		O
ANISOU	36	O	GLU A 406	4388	4326	4431	23	75	21	O
ATOM	37	CB	GLU A 406	41.151	22.996	84.009	1.00	38.62		C
ANISOU	37	CB	GLU A 406	4774	5087	4814	72	-213	-63	C
ATOM	38	CG	GLU A 406	42.199	24.009	83.657	1.00	42.90		C
ANISOU	38	CG	GLU A 406	5265	5561	5476	-144	28	90	C
ATOM	39	CD	GLU A 406	42.099	25.492	83.825	1.00	46.53		C

2025.04.04 14:00:00

ANISOU	39	CD	GLU	A	406	5937	5757	5985	39	55	-58	C
ATOM	40	OE1	GLU	A	406	41.014	26.121	83.840	1.00	47.63		O
ANISOU	40	OE1	GLU	A	406	5807	6185	6105	64	-66	-3	O
ATOM	41	OE2	GLU	A	406	43.201	26.138	83.932	1.00	48.05		O
ANISOU	41	OE2	GLU	A	406	5984	6029	6244	-25	-38	-141	O
ATOM	42	N	LEU	A	407	41.204	22.874	80.717	1.00	30.75		N
ANISOU	42	N	LEU	A	407	3597	4095	3993	67	-165	-26	N
ATOM	43	CA	LEU	A	407	41.903	22.531	79.517	1.00	30.07		C
ANISOU	43	CA	LEU	A	407	3494	3990	3943	115	-134	65	C
ATOM	44	C	LEU	A	407	43.435	22.550	79.725	1.00	31.27		C
ANISOU	44	C	LEU	A	407	3497	4217	4169	2	-112	20	C
ATOM	45	O	LEU	A	407	43.881	23.391	80.490	1.00	30.61		O
ANISOU	45	O	LEU	A	407	3258	4132	4240	66	-101	-21	O
ATOM	46	CB	LEU	A	407	41.649	23.568	78.415	1.00	28.26		C
ANISOU	46	CB	LEU	A	407	3228	3746	3763	29	-113	-33	C
ATOM	47	CG	LEU	A	407	40.187	23.605	77.902	1.00	26.89		C
ANISOU	47	CG	LEU	A	407	3178	3570	3469	149	-77	3	C
ATOM	48	CD1	LEU	A	407	40.175	24.443	76.618	1.00	26.19		C
ANISOU	48	CD1	LEU	A	407	3100	3351	3499	61	37	19	C
ATOM	49	CD2	LEU	A	407	39.686	22.202	77.667	1.00	26.73		C
ANISOU	49	CD2	LEU	A	407	2994	3575	3589	89	-56	128	C
ATOM	50	N	ASN	A	408	44.132	21.677	79.008	1.00	33.58		N
ANISOU	50	N	ASN	A	408	4138	4293	4328	106	-18	-20	N
ATOM	51	CA	ASN	A	408	45.598	21.797	79.140	1.00	35.58		C
ANISOU	51	CA	ASN	A	408	4173	4655	4692	55	-49	-36	C
ATOM	52	C	ASN	A	408	46.002	23.026	78.339	1.00	36.95		C
ANISOU	52	C	ASN	A	408	4461	4781	4796	35	1	52	C
ATOM	53	O	ASN	A	408	45.213	23.564	77.556	1.00	36.50		O
ANISOU	53	O	ASN	A	408	4277	4887	4704	-25	25	6	O
ATOM	54	CB	ASN	A	408	46.331	20.558	78.694	1.00	36.63		C
ANISOU	54	CB	ASN	A	408	4492	4717	4708	200	-6	-31	C
ATOM	55	CG	ASN	A	408	46.048	20.146	77.271	1.00	36.32		C
ANISOU	55	CG	ASN	A	408	4346	4754	4701	89	15	-13	C
ATOM	56	OD1	ASN	A	408	45.999	21.002	76.388	1.00	36.87		O
ANISOU	56	OD1	ASN	A	408	4442	4779	4790	159	114	-1	O
ATOM	57	ND2	ASN	A	408	45.870	18.847	77.051	1.00	37.25		N
ANISOU	57	ND2	ASN	A	408	4626	4785	4744	155	54	-41	N
ATOM	58	N	GLU	A	409	47.255	23.461	78.456	1.00	38.07		N
ANISOU	58	N	GLU	A	409	4528	4910	5025	46	-64	-21	N
ATOM	59	CA	GLU	A	409	47.684	24.665	77.761	1.00	39.20		C
ANISOU	59	CA	GLU	A	409	4768	5065	50				

ANISOU	71	CB	LYS	A	410	5150	5213	5454	181	25	18	C
ATOM	72	CG	LYS	A	410	47.458	20.740	73.457	1.00	44.64		C
ANISOU	72	CG	LYS	A	410	5565	5594	5803	-20	-68	-91	C
ATOM	73	CD	LYS	A	410	47.498	19.428	74.240	1.00	46.31		C
ANISOU	73	CD	LYS	A	410	5878	5778	5938	6	16	48	C
ATOM	74	CE	LYS	A	410	46.695	18.362	73.510	1.00	47.17		C
ANISOU	74	CE	LYS	A	410	6037	5854	6030	-11	2	-47	C
ATOM	75	NZ	LYS	A	410	45.610	17.732	74.308	1.00	47.79		N
ANISOU	75	NZ	LYS	A	410	6050	6032	6076	36	63	-48	N
ATOM	76	N	ASP	A	411	45.423	22.744	74.439	1.00	35.18		N
ANISOU	76	N	ASP	A	411	4135	4526	4707	148	-61	18	N
ATOM	77	CA	ASP	A	411	43.998	22.806	74.077	1.00	32.85		C
ANISOU	77	CA	ASP	A	411	3975	4136	4370	174	39	7	C
ATOM	78	C	ASP	A	411	43.466	24.227	74.250	1.00	32.37		C
ANISOU	78	C	ASP	A	411	3909	4131	4259	142	3	46	C
ATOM	79	O	ASP	A	411	42.678	24.657	73.393	1.00	29.80		O
ANISOU	79	O	ASP	A	411	3381	3767	4173	396	227	-138	O
ATOM	80	CB	ASP	A	411	43.197	21.774	74.857	1.00	32.86		C
ANISOU	80	CB	ASP	A	411	4022	4211	4254	108	-15	22	C
ATOM	81	CG	ASP	A	411	43.488	20.337	74.494	1.00	33.23		C
ANISOU	81	CG	ASP	A	411	4008	4275	4344	135	-59	11	C
ATOM	82	OD1	ASP	A	411	44.035	20.081	73.411	1.00	35.03		O
ANISOU	82	OD1	ASP	A	411	4439	4490	4382	246	-69	26	O
ATOM	83	OD2	ASP	A	411	43.189	19.384	75.244	1.00	33.96		O
ANISOU	83	OD2	ASP	A	411	4179	4148	4576	132	-130	-3	O
ATOM	84	N	ASP	A	412	43.863	24.920	75.299	1.00	32.19		N
ANISOU	84	N	ASP	A	412	3713	4205	4314	87	46	33	N
ATOM	85	CA	ASP	A	412	43.434	26.311	75.507	1.00	33.69		C
ANISOU	85	CA	ASP	A	412	3959	4210	4631	40	98	88	C
ATOM	86	C	ASP	A	412	43.948	27.194	74.377	1.00	33.14		C
ANISOU	86	C	ASP	A	412	3915	4285	4392	36	52	9	C
ATOM	87	O	ASP	A	412	43.258	28.083	73.893	1.00	32.19		O
ANISOU	87	O	ASP	A	412	3706	4220	4306	-124	86	76	O
ATOM	88	CB	ASP	A	412	43.889	26.811	76.859	1.00	37.61		C
ANISOU	88	CB	ASP	A	412	4614	4918	4758	-20	-31	11	C
ATOM	89	CG	ASP	A	412	43.634	28.229	77.299	1.00	42.22		C
ANISOU	89	CG	ASP	A	412	5493	5127	5420	76	-11	-79	C
ATOM	90	OD1	ASP	A	412	43.240	29.189	76.599	1.00	41.69		O
ANISOU	90	OD1	ASP	A	412	5302	5222	5316	61	-25	-61	O
ATOM	91	OD2	ASP	A	412	43.693	28.409	78.555	1.00	45.86		O
ANISOU	91	OD2	ASP	A	412	6083	5826	5515	31	37	-123	O
ATOM	92	N	ASP	A	413	45.186	26.985	73.919	1.00	33.23		N
ANISOU	92	N	ASP	A	413	3947	4297	4380	21	128	-36	N
ATOM	93	CA	ASP	A	413	45.726	27.835	72.859	1.00	33.18		C
ANISOU	93	CA	ASP	A	413	3965	4321	4322	33	143	-40	C
ATOM	94	C	ASP	A	413	44.980	27.675	71.552	1.00	31.01		C
ANISOU	94	C	ASP	A	413	3436	4091	4253	101	290	1	C
ATOM	95	O	ASP	A	413	44.794	28.636	70.810	1.00	29.88		O
ANISOU	95	O	ASP	A	413	3073	4219	4060	21	307	40	O
ATOM	96	CB	ASP	A	413	47.209	27.472	72.638	1.00	36.39		C
ANISOU	96	CB	ASP	A	413	4115	4850	4860	115	172	-14	C
ATOM	97	CG	ASP	A	413	48.100	28.137	73.665	1.00	39.77		C
ANISOU	97	CG	ASP	A	413	4814	5190	5107	-49	-46	-75	C
ATOM	98	OD1	ASP	A	413	47.634	29.045	74.401	1.00	41.39		O
ANISOU	98	OD1	ASP	A	413	4961	5376	5390	84	25	-129	O
ATOM	99	OD2	ASP	A	413	49.289	27.737	73.710	1.00	40.98		O
ANISOU	99	OD2	ASP	A	413	4919	5314	5337	34	-4	-36	O
ATOM	100	N	GLN	A	414	44.505	26.453	71.311	1.00	30.31		N
ANISOU	100	N	GLN	A	414	3359	4105	4050	75	261	-112	N
ATOM	101	CA	GLN	A	414	43.725	26.129	70.124	1.00	30.58		C
ANISOU	101	CA	GLN	A	414	3461	4162	3996	104	183	27	C
ATOM	102	C	GLN	A	414	42.429	26.940	70.167	1.00	28.35		C
ANISOU	102	C	GLN	A	414	3389	3698	3685	-51	97	-26	C
ATOM	103	O	GLN	A	414	42.049	27.542	69.168	1.00	27.07		O

ANISOU	103	O	GLN	A	414	2863	3826	3597	16	297	-56	O
ATOM	104	CB	GLN	A	414	43.437	24.628	70.097	1.00	33.29		C
ANISOU	104	CB	GLN	A	414	3960	4231	4459	68	140	-46	C
ATOM	105	CG	GLN	A	414	42.767	24.142	68.831	1.00	36.44		C
ANISOU	105	CG	GLN	A	414	4523	4811	4510	57	2	-86	C
ATOM	106	CD	GLN	A	414	42.332	22.694	68.807	1.00	38.97		C
ANISOU	106	CD	GLN	A	414	4948	4869	4990	37	17	-30	C
ATOM	107	OE1	GLN	A	414	42.176	21.994	69.813	1.00	39.33		O
ANISOU	107	OE1	GLN	A	414	4907	5059	4978	145	130	-10	O
ATOM	108	NE2	GLN	A	414	42.089	22.204	67.581	1.00	40.14		N
ANISOU	108	NE2	GLN	A	414	5108	5146	4995	97	38	-99	N
ATOM	109	N	VAL	A	415	41.776	26.933	71.336	1.00	27.93		N
ANISOU	109	N	VAL	A	415	3254	3688	3669	24	120	-105	N
ATOM	110	CA	VAL	A	415	40.577	27.777	71.508	1.00	27.64		C
ANISOU	110	CA	VAL	A	415	3407	3565	3531	33	157	56	C
ATOM	111	C	VAL	A	415	40.894	29.248	71.236	1.00	28.30		C
ANISOU	111	C	VAL	A	415	3498	3560	3696	50	97	-32	C
ATOM	112	O	VAL	A	415	40.207	29.882	70.438	1.00	26.80		O
ANISOU	112	O	VAL	A	415	3141	3682	3361	-139	318	40	O
ATOM	113	CB	VAL	A	415	40.021	27.623	72.938	1.00	26.21		C
ANISOU	113	CB	VAL	A	415	3199	3290	3470	81	169	-84	C
ATOM	114	CG1	VAL	A	415	38.926	28.661	73.191	1.00	24.26		C
ANISOU	114	CG1	VAL	A	415	3073	3127	3018	55	100	-31	C
ATOM	115	CG2	VAL	A	415	39.500	26.210	73.170	1.00	26.40		C
ANISOU	115	CG2	VAL	A	415	3219	3299	3513	87	187	-135	C
ATOM	116	N	GLN	A	416	41.937	29.807	71.834	1.00	30.21		N
ANISOU	116	N	GLN	A	416	3553	3958	3968	-40	20	-38	N
ATOM	117	CA	GLN	A	416	42.305	31.223	71.647	1.00	32.66		C
ANISOU	117	CA	GLN	A	416	3944	4116	4350	-84	87	5	C
ATOM	118	C	GLN	A	416	42.582	31.547	70.189	1.00	32.92		C
ANISOU	118	C	GLN	A	416	3868	4255	4385	-173	37	64	C
ATOM	119	O	GLN	A	416	42.093	32.561	69.677	1.00	32.32		O
ANISOU	119	O	GLN	A	416	3600	4158	4521	-304	242	144	O
ATOM	120	CB	GLN	A	416	43.441	31.586	72.610	1.00	34.16		C
ANISOU	120	CB	GLN	A	416	4088	4399	4493	-71	6	-42	C
ATOM	121	CG	GLN	A	416	43.730	33.065	72.837	1.00	35.92		C
ANISOU	121	CG	GLN	A	416	4471	4456	4721	-68	78	-51	C
ATOM	122	CD	GLN	A	416	42.815	33.729	73.852	1.00	36.77		C
ANISOU	122	CD	GLN	A	416	4614	4558	4798	-51	112	-100	C
ATOM	123	OE1	GLN	A	416	41.740	33.219	74.178	1.00	35.20		O
ANISOU	123	OE1	GLN	A	416	4475	4258	4641	-6	99	-75	O
ATOM	124	NE2	GLN	A	416	43.257	34.888	74.359	1.00	36.70		N
ANISOU	124	NE2	GLN	A	416	4667	4464	4813	-11	3	1	N
ATOM	125	N	LYS	A	417	43.251	30.665	69.434	1.00	34.04		N
ANISOU	125	N	LYS	A	417	4038	4303	4592	-131	97	-37	N
ATOM	126	CA	LYS	A	417	43.497	30.890	68.012	1.00	35.76		C
ANISOU	126	CA	LYS	A	417	4375	4586	4628	-163	11	63	C
ATOM	127	C	LYS	A	417	42.222	30.925	67.179	1.00	34.58		C
ANISOU	127	C	LYS	A	417	4260	4343	4536	-93	100	111	C
ATOM	128	O	LYS	A	417	42.025	31.750	66.289	1.00	34.18		O
ANISOU	128	O	LYS	A	417	4068	4441	4476	-196	163	181	O
ATOM	129	CB	LYS	A	417	44.337	29.768	67.395	1.00	38.84		C
ANISOU	129	CB	LYS	A	417	4878	4805	5074	-25	150	-58	C
ATOM	130	CG	LYS	A	417	45.608	29.400	68.112	1.00	42.20		C
ANISOU	130	CG	LYS	A	417	5220	5398	5416	10	-105	56	C
ATOM	131	CD	LYS	A	417	46.384	28.344	67.308	1.00	44.53		C
ANISOU	131	CD	LYS	A	417	5611	5583	5725	80	66	-21	C
ATOM	132	CE	LYS	A	417	47.848	28.366	67.760	1.00	46.02		C
ANISOU	132	CE	LYS	A	417	5687	5874	5924	25	-24	35	C
ATOM	133	NZ	LYS	A	417	48.448	29.714	67.513	1.00	46.73		N
ANISOU	133	NZ	LYS	A	417	5835	5884	6035	5	2	-4	N
ATOM	134	N	ALA	A	418	41.342	29.957	67.464	1.00	33.25		N
ANISOU	134	N	ALA	A	418	4054	4272	4309	-34	52	71	N
ATOM	135	CA	ALA	A	418	40.061	29.907	66.748	1.00	31.26		C

ANISOU	135	CA	ALA	A	418	3863	4041	3973	-119	175	18	C
ATOM	136	C	ALA	A	418	39.239	31.154	67.014	1.00	30.31		C
ANISOU	136	C	ALA	A	418	3761	3858	3898	-223	55	116	C
ATOM	137	O	ALA	A	418	38.595	31.695	66.130	1.00	28.84		O
ANISOU	137	O	ALA	A	418	3437	3784	3737	-282	277	98	O
ATOM	138	CB	ALA	A	418	39.321	28.633	67.148	1.00	30.90		C
ANISOU	138	CB	ALA	A	418	3821	3956	3965	-83	79	14	C
ATOM	139	N	LEU	A	419	39.237	31.719	68.222	1.00	30.33		N
ANISOU	139	N	LEU	A	419	3656	3838	4029	-309	186	10	N
ATOM	140	CA	LEU	A	419	38.502	32.928	68.551	1.00	32.41		C
ANISOU	140	CA	LEU	A	419	3996	4102	4216	-64	20	-35	C
ATOM	141	C	LEU	A	419	39.056	34.157	67.827	1.00	35.75		C
ANISOU	141	C	LEU	A	419	4660	4318	4604	-119	15	148	C
ATOM	142	O	LEU	A	419	38.334	35.129	67.632	1.00	36.41		O
ANISOU	142	O	LEU	A	419	4665	4311	4857	-76	125	39	O
ATOM	143	CB	LEU	A	419	38.553	33.202	70.049	1.00	31.38		C
ANISOU	143	CB	LEU	A	419	3959	3825	4141	-96	9	8	C
ATOM	144	CG	LEU	A	419	37.792	32.275	70.985	1.00	29.76		C
ANISOU	144	CG	LEU	A	419	3581	3926	3801	-17	-12	-50	C
ATOM	145	CD1	LEU	A	419	38.175	32.531	72.435	1.00	29.11		C
ANISOU	145	CD1	LEU	A	419	3735	3547	3780	-9	-39	-54	C
ATOM	146	CD2	LEU	A	419	36.278	32.458	70.802	1.00	28.85		C
ANISOU	146	CD2	LEU	A	419	3560	3738	3664	16	-41	-129	C
ATOM	147	N	ALA	A	420	40.310	34.071	67.420	1.00	38.82		N
ANISOU	147	N	ALA	A	420	4696	4998	5057	20	22	-23	N
ATOM	148	CA	ALA	A	420	40.925	35.169	66.695	1.00	42.84		C
ANISOU	148	CA	ALA	A	420	5345	5283	5649	-74	94	198	C
ATOM	149	C	ALA	A	420	40.876	34.939	65.197	1.00	46.54		C
ANISOU	149	C	ALA	A	420	5897	5976	5809	72	59	70	C
ATOM	150	O	ALA	A	420	41.473	35.806	64.528	1.00	46.77		O
ANISOU	150	O	ALA	A	420	5836	5990	5944	-58	37	24	O
ATOM	151	CB	ALA	A	420	42.383	35.300	67.133	1.00	42.55		C
ANISOU	151	CB	ALA	A	420	5357	5328	5484	-26	68	112	C
ATOM	152	N	SER	A	421	40.238	33.887	64.653	1.00	49.87		N
ANISOU	152	N	SER	A	421	6154	6195	6599	-86	-39	-4	N
ATOM	153	CA	SER	A	421	40.428	33.802	63.210	1.00	54.60		C
ANISOU	153	CA	SER	A	421	6935	7048	6764	-44	46	-15	C
ATOM	154	C	SER	A	421	39.687	34.907	62.460	1.00	57.01		C
ANISOU	154	C	SER	A	421	7152	7227	7282	115	-91	7	C
ATOM	155	O	SER	A	421	38.600	35.374	62.710	1.00	56.19		O
ANISOU	155	O	SER	A	421	7102	7171	7076	-31	-51	-7	O
ATOM	156	CB	SER	A	421	40.370	32.496	62.468	1.00	56.08		C
ANISOU	156	CB	SER	A	421	7128	7019	7159	-29	39	-43	C
ATOM	157	OG	SER	A	421	39.715	32.602	61.206	1.00	57.68		O
ANISOU	157	OG	SER	A	421	7242	7382	7291	-26	-32	29	O
ATOM	158	N	ARG	A	422	40.514	35.340	61.508	1.00	60.66		N
ANISOU	158	N	ARG	A	422	7599	7808	7640	-44	96	-22	N
ATOM	159	CA	ARG	A	422	40.244	36.346	60.509	1.00	63.35		C
ANISOU	159	CA	ARG	A	422	8092	7994	7986	82	32	148	C
ATOM	160	C	ARG	A	422	39.395	35.667	59.422	1.00	65.36		C
ANISOU	160	C	ARG	A	422	8264	8317	8251	-5	-44	27	C
ATOM	161	O	ARG	A	422	39.766	35.074	58.416	1.00	66.33		O
ANISOU	161	O	ARG	A	422	8454	8401	8346	39	22	-11	O
ATOM	162	CB	ARG	A	422	40.997	37.273	60.466	0.00	59.92		C
ATOM	163	CG	ARG	A	422	40.723	38.706	60.039	0.00	56.99		C
ATOM	164	CD	ARG	A	422	40.341	39.575	61.227	0.00	54.62		C
ATOM	165	NE	ARG	A	422	40.086	40.956	60.834	0.00	53.35		N
ATOM	166	CZ	ARG	A	422	39.736	41.924	61.676	0.00	51.98		C
ATOM	167	NH1	ARG	A	422	39.600	41.659	62.970	0.00	52.27		N
ATOM	168	NH2	ARG	A	422	39.524	43.153	61.226	0.00	52.14		N
ATOM	169	N	GLU	A	423	38.106	35.761	59.692	1.00	65.38		N
ANISOU	169	N	GLU	A	423	8268	8334	8238	-4	9	42	N
ATOM	170	CA	GLU	A	423	36.966	35.458	58.893	1.00	65.22		C
ANISOU	170	CA	GLU	A	423	8230	8200	8349	-55	16	23	C

ATOM	171	C	GLU	A	423	36.092	34.307	59.292	1.00	63.05		C
ANISOU	171	C	GLU	A	423	7921	8063	7972	66	-33	-5	C
ATOM	172	O	GLU	A	423	36.424	33.404	60.046	1.00	62.56		O
ANISOU	172	O	GLU	A	423	7907	7979	7885	-22	1	-22	O
ATOM	173	CB	GLU	A	423	37.262	35.696	57.389	1.00	67.48		C
ANISOU	173	CB	GLU	A	423	8545	8674	8420	-14	34	21	C
ATOM	174	CG	GLU	A	423	37.198	37.195	57.260	1.00	69.65		C
ANISOU	174	CG	GLU	A	423	8868	8736	8862	-4	-1	-25	C
ATOM	175	CD	GLU	A	423	37.431	38.247	56.269	1.00	70.95		C
ANISOU	175	CD	GLU	A	423	9060	8927	8969	-18	36	61	C
ATOM	176	OE1	GLU	A	423	36.914	38.204	55.128	1.00	71.70		O
ANISOU	176	OE1	GLU	A	423	9103	9102	9039	-12	-18	6	O
ATOM	177	OE2	GLU	A	423	38.135	39.235	56.635	1.00	71.54		O
ANISOU	177	OE2	GLU	A	423	9115	9008	9058	-42	5	-11	O
ATOM	178	N	ASN	A	424	34.827	34.492	58.891	1.00	60.44		N
ANISOU	178	N	ASN	A	424	7734	7603	7627	-93	107	30	N
ATOM	179	CA	ASN	A	424	33.724	33.638	59.273	1.00	57.76		C
ANISOU	179	CA	ASN	A	424	7432	7276	7238	44	2	-65	C
ATOM	180	C	ASN	A	424	33.628	32.341	58.492	1.00	55.12		C
ANISOU	180	C	ASN	A	424	6949	7060	6936	41	52	111	C
ATOM	181	O	ASN	A	424	32.775	32.089	57.660	1.00	55.76		O
ANISOU	181	O	ASN	A	424	7065	7155	6965	-61	44	6	O
ATOM	182	CB	ASN	A	424	32.402	34.424	59.250	1.00	57.84		C
ANISOU	182	CB	ASN	A	424	7352	7310	7313	-13	37	17	C
ATOM	183	CG	ASN	A	424	31.332	33.693	60.060	1.00	57.45		C
ANISOU	183	CG	ASN	A	424	7353	7259	7216	5	34	-2	C
ATOM	184	OD1	ASN	A	424	30.127	33.860	59.837	1.00	57.50		O
ANISOU	184	OD1	ASN	A	424	7350	7270	7227	25	72	0	O
ATOM	185	ND2	ASN	A	424	31.807	32.870	60.983	1.00	56.42		N
ANISOU	185	ND2	ASN	A	424	7196	7128	7113	-30	63	-45	N
ATOM	186	N	THR	A	425	34.530	31.452	58.852	1.00	51.97		N
ANISOU	186	N	THR	A	425	6741	6514	6491	-139	151	-38	N
ATOM	187	CA	THR	A	425	34.702	30.138	58.285	1.00	49.63		C
ANISOU	187	CA	THR	A	425	6342	6305	6208	-147	138	134	C
ATOM	188	C	THR	A	425	33.915	29.109	59.092	1.00	45.80		C
ANISOU	188	C	THR	A	425	5959	5706	5738	-10	-1	-132	C
ATOM	189	O	THR	A	425	33.537	29.348	60.235	1.00	43.73		O
ANISOU	189	O	THR	A	425	5602	5307	5705	-99	100	1	O
ATOM	190	CB	THR	A	425	36.205	29.790	58.329	1.00	51.23		C
ANISOU	190	CB	THR	A	425	6461	6520	6486	2	46	16	C
ATOM	191	OG1	THR	A	425	36.604	29.503	59.677	1.00	52.07		O
ANISOU	191	OG1	THR	A	425	6610	6666	6509	10	42	32	O
ATOM	192	CG2	THR	A	425	37.045	30.974	57.854	1.00	51.68		C
ANISOU	192	CG2	THR	A	425	6550	6545	6540	-14	56	50	C
ATOM	193	N	GLN	A	426	33.658	27.974	58.466	1.00	42.17		N
ANISOU	193	N	GLN	A	426	5411	5391	5223	-37	118	127	N
ATOM	194	CA	GLN	A	426	32.982	26.855	59.105	1.00	39.41		C
ANISOU	194	CA	GLN	A	426	5005	5086	4884	37	-3	-56	C
ATOM	195	C	GLN	A	426	33.993	26.128	59.982	1.00	37.10		C
ANISOU	195	C	GLN	A	426	4776	4805	4515	-74	159	-55	C
ATOM	196	O	GLN	A	426	35.066	25.714	59.503	1.00	37.82		O
ANISOU	196	O	GLN	A	426	4897	4908	4565	-1	262	-142	O
ATOM	197	CB	GLN	A	426	32.450	25.920	58.005	1.00	39.00		C
ANISOU	197	CB	GLN	A	426	4990	5007	4823	-6	80	-25	C
ATOM	198	CG	GLN	A	426	31.402	24.930	58.474	1.00	39.95		C
ANISOU	198	CG	GLN	A	426	5175	4998	5006	-84	66	-24	C
ATOM	199	CD	GLN	A	426	31.088	23.834	57.460	1.00	39.53		C
ANISOU	199	CD	GLN	A	426	5106	5002	4912	-5	105	-14	C
ATOM	200	OE1	GLN	A	426	31.921	22.931	57.334	1.00	39.47		O
ANISOU	200	OE1	GLN	A	426	5229	4871	4896	-25	72	-23	O
ATOM	201	NE2	GLN	A	426	29.942	23.904	56.798	1.00	39.22		N
ANISOU	201	NE2	GLN	A	426	5148	4927	4828	-79	111	-10	N
ATOM	202	N	LEU	A	427	33.732	25.962	61.274	1.00	33.29		N
ANISOU	202	N	LEU	A	427	4191	4150	4307	0	87	-103	N

20250404 09:04:00

ATOM	203	CA	LEU	A	427	34.639	25.301	62.188	1.00	31.60		C
ANISOU	203	CA	LEU	A	427	4120	3952	3935	-70	202	-138	C
ATOM	204	C	LEU	A	427	34.269	23.842	62.475	1.00	30.46		C
ANISOU	204	C	LEU	A	427	3987	3948	3639	13	129	-45	C
ATOM	205	O	LEU	A	427	35.135	23.106	62.938	1.00	30.00		O
ANISOU	205	O	LEU	A	427	3925	3879	3595	168	301	-167	O
ATOM	206	CB	LEU	A	427	34.701	26.001	63.560	1.00	30.35		C
ANISOU	206	CB	LEU	A	427	3809	3923	3800	-1	112	-28	C
ATOM	207	CG	LEU	A	427	35.428	27.332	63.595	1.00	30.36		C
ANISOU	207	CG	LEU	A	427	3871	3888	3779	20	61	-68	C
ATOM	208	CD1	LEU	A	427	35.288	27.954	64.974	1.00	29.52		C
ANISOU	208	CD1	LEU	A	427	3708	3678	3830	1	87	-102	C
ATOM	209	CD2	LEU	A	427	36.894	27.140	63.235	1.00	30.35		C
ANISOU	209	CD2	LEU	A	427	3901	3837	3792	-12	124	-47	C
ATOM	210	N	MET	A	428	32.988	23.532	62.301	1.00	29.77		N
ANISOU	210	N	MET	A	428	3951	3747	3615	20	240	-87	N
ATOM	211	CA	MET	A	428	32.508	22.182	62.580	1.00	29.75		C
ANISOU	211	CA	MET	A	428	3885	3803	3617	-2	150	-45	C
ATOM	212	C	MET	A	428	31.203	21.991	61.818	1.00	30.03		C
ANISOU	212	C	MET	A	428	3819	3836	3756	-31	133	-27	C
ATOM	213	O	MET	A	428	30.451	22.931	61.548	1.00	28.48		O
ANISOU	213	O	MET	A	428	3602	3655	3564	-152	286	-228	O
ATOM	214	CB	MET	A	428	32.292	22.019	64.088	1.00	29.26		C
ANISOU	214	CB	MET	A	428	3881	3633	3605	26	154	-38	C
ATOM	215	CG	MET	A	428	32.239	20.562	64.570	1.00	28.39		C
ANISOU	215	CG	MET	A	428	3766	3616	3407	31	240	-80	C
ATOM	216	SD	MET	A	428	31.278	20.440	66.111	1.00	25.70		S
ANISOU	216	SD	MET	A	428	3358	3041	3368	36	234	-505	S
ATOM	217	CE	MET	A	428	29.628	20.532	65.423	1.00	26.43		C
ANISOU	217	CE	MET	A	428	3500	3193	3348	39	38	-197	C
ATOM	218	N	ASN	A	429	30.969	20.760	61.384	1.00	30.83		N
ANISOU	218	N	ASN	A	429	3955	3869	3892	41	153	-130	N
ATOM	219	CA	ASN	A	429	29.748	20.434	60.663	1.00	31.92		C
ANISOU	219	CA	ASN	A	429	3919	4050	4161	85	98	-89	C
ATOM	220	C	ASN	A	429	29.519	18.945	60.884	1.00	31.94		C
ANISOU	220	C	ASN	A	429	3957	4076	4104	32	119	-53	C
ATOM	221	O	ASN	A	429	30.201	18.120	60.258	1.00	33.09		O
ANISOU	221	O	ASN	A	429	4188	4226	4160	42	182	-215	O
ATOM	222	CB	ASN	A	429	29.797	20.803	59.196	1.00	34.07		C
ANISOU	222	CB	ASN	A	429	4403	4315	4229	74	142	-37	C
ATOM	223	CG	ASN	A	429	28.451	20.675	58.523	1.00	36.74		C
ANISOU	223	CG	ASN	A	429	4631	4747	4583	26	-52	-56	C
ATOM	224	OD1	ASN	A	429	27.419	20.747	59.208	1.00	37.57		O
ANISOU	224	OD1	ASN	A	429	4722	4952	4602	43	-13	-104	O
ATOM	225	ND2	ASN	A	429	28.429	20.485	57.210	1.00	37.30		N
ANISOU	225	ND2	ASN	A	429	4892	4698	4583	83	44	-16	N
ATOM	226	N	ARG	A	430	28.680	18.646	61.861	1.00	30.73		N
ANISOU	226	N	ARG	A	430	3821	3885	3969	71	102	-123	N
ATOM	227	CA	ARG	A	430	28.476	17.228	62.191	1.00	32.06		C
ANISOU	227	CA	ARG	A	430	4078	3965	4140	-24	191	-105	C
ATOM	228	C	ARG	A	430	27.136	17.026	62.862	1.00	32.39		C
ANISOU	228	C	ARG	A	430	3955	4076	4278	5	76	-137	C
ATOM	229	O	ARG	A	430	26.751	17.893	63.646	1.00	31.05		O
ANISOU	229	O	ARG	A	430	3572	3968	4258	4	35	-149	O
ATOM	230	CB	ARG	A	430	29.612	16.842	63.128	1.00	33.68		C
ANISOU	230	CB	ARG	A	430	4203	4287	4308	-62	46	-42	C
ATOM	231	CG	ARG	A	430	29.598	15.411	63.653	1.00	36.38		C
ANISOU	231	CG	ARG	A	430	4689	4417	4717	-66	67	60	C
ATOM	232	CD	ARG	A	430	30.321	14.483	62.727	1.00	38.04		C
ANISOU	232	CD	ARG	A	430	4850	4705	4899	-11	74	-69	C
ATOM	233	NE	ARG	A	430	31.735	14.848	62.498	1.00	39.38		N
ANISOU	233	NE	ARG	A	430	4877	4985	5100	-56	98	-43	N
ATOM	234	CZ	ARG	A	430	32.449	13.997	61.741	1.00	41.34		C
ANISOU	234	CZ	ARG	A	430	5178	5209	5320	50	112	-127	C

ATOM	235	NH1	ARG	A	430	31.839	12.904	61.272	1.00	41.92		N
ANISOU	235	NH1	ARG	A	430	5264	5295	5370	-5	26	-123	N
ATOM	236	NH2	ARG	A	430	33.718	14.264	61.478	1.00	41.05		N
ANISOU	236	NH2	ARG	A	430	5153	5243	5199	57	78	-178	N
ATOM	237	N	ASP	A	431	26.427	15.931	62.583	1.00	32.85		N
ANISOU	237	N	ASP	A	431	4151	4003	4327	43	10	-140	N
ATOM	238	CA	ASP	A	431	25.164	15.664	63.275	1.00	33.72		C
ANISOU	238	CA	ASP	A	431	4150	4041	4621	80	10	-74	C
ATOM	239	C	ASP	A	431	24.129	16.766	63.080	1.00	31.60		C
ANISOU	239	C	ASP	A	431	3857	4027	4123	-22	-44	-66	C
ATOM	240	O	ASP	A	431	23.332	16.998	63.995	1.00	30.44		O
ANISOU	240	O	ASP	A	431	3767	3721	4077	55	-132	-77	O
ATOM	241	CB	ASP	A	431	25.525	15.576	64.761	1.00	37.31		C
ANISOU	241	CB	ASP	A	431	4767	4659	4751	114	-111	-60	C
ATOM	242	CG	ASP	A	431	24.609	14.787	65.650	1.00	41.39		C
ANISOU	242	CG	ASP	A	431	5255	5147	5323	-76	98	70	C
ATOM	243	OD1	ASP	A	431	23.647	14.173	65.134	1.00	42.79		O
ANISOU	243	OD1	ASP	A	431	5319	5455	5483	-86	-56	5	O
ATOM	244	OD2	ASP	A	431	24.864	14.779	66.885	1.00	43.70		O
ANISOU	244	OD2	ASP	A	431	5720	5403	5480	-44	-113	12	O
ATOM	245	N	ASN	A	432	24.144	17.410	61.939	1.00	29.57		N
ANISOU	245	N	ASN	A	432	3550	3664	4020	14	-83	-160	N
ATOM	246	CA	ASN	A	432	23.245	18.491	61.558	1.00	30.19		C
ANISOU	246	CA	ASN	A	432	3732	3756	3981	62	-93	-159	C
ATOM	247	C	ASN	A	432	23.346	19.756	62.389	1.00	28.16		C
ANISOU	247	C	ASN	A	432	3365	3547	3789	81	-36	-40	C
ATOM	248	O	ASN	A	432	22.390	20.483	62.639	1.00	25.96		O
ANISOU	248	O	ASN	A	432	2946	3382	3537	-156	-248	-88	O
ATOM	249	CB	ASN	A	432	21.786	18.014	61.397	1.00	31.82		C
ANISOU	249	CB	ASN	A	432	3892	4041	4158	-62	-136	-102	C
ATOM	250	CG	ASN	A	432	21.481	18.031	59.900	1.00	33.21		C
ANISOU	250	CG	ASN	A	432	4242	4239	4136	44	-48	-67	C
ATOM	251	OD1	ASN	A	432	21.410	16.952	59.304	1.00	34.07		O
ANISOU	251	OD1	ASN	A	432	4423	4318	4204	96	-199	-152	O
ATOM	252	ND2	ASN	A	432	21.340	19.228	59.338	1.00	33.00		N
ANISOU	252	ND2	ASN	A	432	4252	4154	4133	101	-12	-187	N
ATOM	253	N	ILE	A	433	24.579	20.075	62.807	1.00	27.29		N
ANISOU	253	N	ILE	A	433	3423	3473	3472	62	3	-139	N
ATOM	254	CA	ILE	A	433	24.836	21.341	63.502	1.00	27.53		C
ANISOU	254	CA	ILE	A	433	3519	3359	3584	-38	-108	-2	C
ATOM	255	C	ILE	A	433	26.138	21.837	62.872	1.00	27.63		C
ANISOU	255	C	ILE	A	433	3655	3447	3396	-19	-33	-148	C
ATOM	256	O	ILE	A	433	27.191	21.213	62.932	1.00	28.12		O
ANISOU	256	O	ILE	A	433	3583	3550	3550	-70	40	-79	O
ATOM	257	CB	ILE	A	433	24.851	21.252	65.009	1.00	28.90		C
ANISOU	257	CB	ILE	A	433	3705	3647	3628	7	6	-121	C
ATOM	258	CG1	ILE	A	433	25.119	22.600	65.684	1.00	29.59		C
ANISOU	258	CG1	ILE	A	433	3759	3694	3791	-63	-86	-98	C
ATOM	259	CG2	ILE	A	433	25.868	20.240	65.532	1.00	30.05		C
ANISOU	259	CG2	ILE	A	433	3842	3855	3721	57	-44	-70	C
ATOM	260	CD1	ILE	A	433	24.084	23.673	65.541	1.00	29.82		C
ANISOU	260	CD1	ILE	A	433	3808	3683	3840	-39	12	-113	C
ATOM	261	N	GLU	A	434	25.969	22.950	62.193	1.00	26.98		N
ANISOU	261	N	GLU	A	434	3817	3461	2975	-28	-36	-222	N
ATOM	262	CA	GLU	A	434	27.087	23.636	61.549	1.00	29.04		C
ANISOU	262	CA	GLU	A	434	3782	3621	3630	-73	-4	-186	C
ATOM	263	C	GLU	A	434	27.496	24.805	62.448	1.00	26.87		C
ANISOU	263	C	GLU	A	434	3410	3498	3302	66	-10	-121	C
ATOM	264	O	GLU	A	434	26.605	25.529	62.918	1.00	25.79		O
ANISOU	264	O	GLU	A	434	3384	3312	3102	1	-171	-307	O
ATOM	265	CB	GLU	A	434	26.555	24.135	60.208	1.00	32.25		C
ANISOU	265	CB	GLU	A	434	4288	4141	3824	16	-151	-100	C
ATOM	266	CG	GLU	A	434	27.504	25.003	59.425	1.00	35.93		C
ANISOU	266	CG	GLU	A	434	4594	4572	4486	-111	112	6	C

ATOM	267	CD	GLU	A	434	26.879	25.554	58.153	1.00	38.19		C
ANISOU	267	CD	GLU	A	434	4868	4933	4709	16	-31	89	C
ATOM	268	OE1	GLU	A	434	25.651	25.820	58.096	1.00	39.69		O
ANISOU	268	OE1	GLU	A	434	4945	5113	5020	63	136	109	O
ATOM	269	OE2	GLU	A	434	27.647	25.674	57.183	1.00	39.34		O
ANISOU	269	OE2	GLU	A	434	4893	5161	4894	4	80	176	O
ATOM	270	N	ILE	A	435	28.784	24.958	62.728	1.00	24.78		N
ANISOU	270	N	ILE	A	435	3317	3072	3025	-85	114	-224	N
ATOM	271	CA	ILE	A	435	29.257	26.019	63.625	1.00	24.58		C
ANISOU	271	CA	ILE	A	435	3236	3053	3049	-50	69	-179	C
ATOM	272	C	ILE	A	435	30.294	26.872	62.886	1.00	24.98		C
ANISOU	272	C	ILE	A	435	3223	3170	3098	-118	-12	-130	C
ATOM	273	O	ILE	A	435	31.274	26.306	62.400	1.00	26.66		O
ANISOU	273	O	ILE	A	435	3488	3317	3325	-43	95	-112	O
ATOM	274	CB	ILE	A	435	29.821	25.456	64.940	1.00	24.87		C
ANISOU	274	CB	ILE	A	435	3248	3087	3116	1	59	-187	C
ATOM	275	CG1	ILE	A	435	28.785	24.576	65.663	1.00	25.95		C
ANISOU	275	CG1	ILE	A	435	3476	3188	3195	-106	-43	-67	C
ATOM	276	CG2	ILE	A	435	30.276	26.587	65.861	1.00	24.85		C
ANISOU	276	CG2	ILE	A	435	3244	3188	3010	1	104	-180	C
ATOM	277	CD1	ILE	A	435	29.256	23.840	66.869	1.00	26.22		C
ANISOU	277	CD1	ILE	A	435	3513	3250	3198	-70	21	-6	C
ATOM	278	N	THR	A	436	29.988	28.169	62.768	1.00	24.37		N
ANISOU	278	N	THR	A	436	3273	3094	2894	-150	114	-28	N
ATOM	279	CA	THR	A	436	30.940	29.080	62.136	1.00	25.67		C
ANISOU	279	CA	THR	A	436	3541	3121	3091	-174	92	2	C
ATOM	280	C	THR	A	436	31.724	29.829	63.189	1.00	25.18		C
ANISOU	280	C	THR	A	436	3136	3245	3187	-221	131	93	C
ATOM	281	O	THR	A	436	31.430	29.739	64.379	1.00	24.31		O
ANISOU	281	O	THR	A	436	3137	2996	3103	-181	80	105	O
ATOM	282	CB	THR	A	436	30.201	30.153	61.300	1.00	27.65		C
ANISOU	282	CB	THR	A	436	3643	3418	3444	-45	-68	111	C
ATOM	283	OG1	THR	A	436	29.412	31.009	62.123	1.00	27.54		O
ANISOU	283	OG1	THR	A	436	3778	3251	3436	-120	6	203	O
ATOM	284	CG2	THR	A	436	29.291	29.450	60.283	1.00	28.64		C
ANISOU	284	CG2	THR	A	436	3783	3630	3468	-86	-130	107	C
ATOM	285	N	VAL	A	437	32.736	30.592	62.713	1.00	25.05		N
ANISOU	285	N	VAL	A	437	3417	2954	3148	-222	220	85	N
ATOM	286	CA	VAL	A	437	33.495	31.412	63.651	1.00	24.74		C
ANISOU	286	CA	VAL	A	437	3024	3161	3215	-268	253	135	C
ATOM	287	C	VAL	A	437	32.579	32.414	64.333	1.00	24.55		C
ANISOU	287	C	VAL	A	437	3136	3094	3096	-223	155	111	C
ATOM	288	O	VAL	A	437	32.779	32.653	65.524	1.00	23.46		O
ANISOU	288	O	VAL	A	437	3069	2771	3072	-143	210	83	O
ATOM	289	CB	VAL	A	437	34.603	32.190	62.859	1.00	26.10		C
ANISOU	289	CB	VAL	A	437	3277	3382	3258	-330	349	167	C
ATOM	290	CG1	VAL	A	437	35.277	33.207	63.743	1.00	26.57		C
ANISOU	290	CG1	VAL	A	437	3524	3348	3223	-185	313	65	C
ATOM	291	CG2	VAL	A	437	35.602	31.101	62.489	1.00	28.12		C
ANISOU	291	CG2	VAL	A	437	3345	3737	3603	-156	334	86	C
ATOM	292	N	ARG	A	438	31.613	32.996	63.616	1.00	24.20		N
ANISOU	292	N	ARG	A	438	3218	2981	2995	-163	220	160	N
ATOM	293	CA	ARG	A	438	30.692	33.944	64.248	1.00	24.68		C
ANISOU	293	CA	ARG	A	438	3290	3086	3002	-131	223	156	C
ATOM	294	C	ARG	A	438	29.978	33.277	65.434	1.00	23.38		C
ANISOU	294	C	ARG	A	438	3311	2812	2762	-89	125	87	C
ATOM	295	O	ARG	A	438	29.904	33.861	66.514	1.00	22.44		O
ANISOU	295	O	ARG	A	438	3346	2506	2675	-183	378	190	O
ATOM	296	CB	ARG	A	438	29.669	34.411	63.207	1.00	28.16		C
ANISOU	296	CB	ARG	A	438	3611	3594	3495	-64	-42	294	C
ATOM	297	CG	ARG	A	438	28.713	35.451	63.723	1.00	31.14		C
ANISOU	297	CG	ARG	A	438	4077	3779	3976	-1	157	63	C
ATOM	298	CD	ARG	A	438	27.764	35.933	62.618	1.00	34.29		C
ANISOU	298	CD	ARG	A	438	4372	4392	4265	-53	-72	187	C

ATOM	299	NE	ARG	A	438	26.851	36.917	63.189	1.00	37.27		N
ANISOU	299	NE	ARG	A	438	4736	4647	4778	78	86	68	N
ATOM	300	CZ	ARG	A	438	25.791	36.661	63.952	1.00	38.91		C
ANISOU	300	CZ	ARG	A	438	4806	4921	5057	-41	97	76	C
ATOM	301	NH1	ARG	A	438	25.458	35.414	64.240	1.00	39.55		N
ANISOU	301	NH1	ARG	A	438	4980	4877	5171	-4	108	66	N
ATOM	302	NH2	ARG	A	438	25.045	37.650	64.444	1.00	39.77		N
ANISOU	302	NH2	ARG	A	438	4958	4962	5191	-40	97	-21	N
ATOM	303	N	ASP	A	439	29.495	32.063	65.276	1.00	20.60		N
ANISOU	303	N	ASP	A	439	2708	2801	2319	-32	66	39	N
ATOM	304	CA	ASP	A	439	28.883	31.366	66.411	1.00	21.02		C
ANISOU	304	CA	ASP	A	439	2826	2641	2521	-82	66	72	C
ATOM	305	C	ASP	A	439	29.881	31.095	67.540	1.00	20.11		C
ANISOU	305	C	ASP	A	439	2514	2517	2609	4	88	-1	C
ATOM	306	O	ASP	A	439	29.634	31.277	68.721	1.00	19.64		O
ANISOU	306	O	ASP	A	439	2660	2230	2572	-3	154	26	O
ATOM	307	CB	ASP	A	439	28.402	29.981	65.963	1.00	20.69		C
ANISOU	307	CB	ASP	A	439	2678	2756	2427	-199	128	-20	C
ATOM	308	CG	ASP	A	439	27.382	30.072	64.866	1.00	20.88		C
ANISOU	308	CG	ASP	A	439	2724	2697	2511	-96	144	102	C
ATOM	309	OD1	ASP	A	439	26.366	30.761	65.013	1.00	21.12		O
ANISOU	309	OD1	ASP	A	439	2808	2896	2320	41	-29	6	O
ATOM	310	OD2	ASP	A	439	27.556	29.433	63.810	1.00	23.27		O
ANISOU	310	OD2	ASP	A	439	3051	3241	2551	-67	10	-162	O
ATOM	311	N	PHE	A	440	31.076	30.603	67.161	1.00	19.54		N
ANISOU	311	N	PHE	A	440	2493	2361	2571	85	43	78	N
ATOM	312	CA	PHE	A	440	32.100	30.246	68.128	1.00	19.79		C
ANISOU	312	CA	PHE	A	440	2425	2592	2502	26	67	-134	C
ATOM	313	C	PHE	A	440	32.518	31.417	68.988	1.00	19.93		C
ANISOU	313	C	PHE	A	440	2593	2616	2365	10	-47	-24	C
ATOM	314	O	PHE	A	440	32.755	31.232	70.186	1.00	18.54		O
ANISOU	314	O	PHE	A	440	2415	2488	2140	3	225	1	O
ATOM	315	CB	PHE	A	440	33.298	29.737	67.297	1.00	19.80		C
ANISOU	315	CB	PHE	A	440	2304	2693	2526	145	190	-16	C
ATOM	316	CG	PHE	A	440	34.412	29.109	68.102	1.00	19.76		C
ANISOU	316	CG	PHE	A	440	2443	2654	2409	38	102	-108	C
ATOM	317	CD1	PHE	A	440	34.295	27.791	68.493	1.00	20.57		C
ANISOU	317	CD1	PHE	A	440	2658	2707	2451	20	81	-146	C
ATOM	318	CD2	PHE	A	440	35.575	29.780	68.471	1.00	20.34		C
ANISOU	318	CD2	PHE	A	440	2594	2644	2492	-44	137	-151	C
ATOM	319	CE1	PHE	A	440	35.257	27.125	69.211	1.00	19.74		C
ANISOU	319	CE1	PHE	A	440	2616	2507	2375	21	98	-183	C
ATOM	320	CE2	PHE	A	440	36.562	29.155	69.213	1.00	20.51		C
ANISOU	320	CE2	PHE	A	440	2598	2731	2464	12	133	-146	C
ATOM	321	CZ	PHE	A	440	36.390	27.834	69.569	1.00	20.48		C
ANISOU	321	CZ	PHE	A	440	2429	2757	2594	95	43	-26	C
ATOM	322	N	LYS	A	441	32.564	32.610	68.418	1.00	19.50		N
ANISOU	322	N	LYS	A	441	2444	2481	2483	50	21	-45	N
ATOM	323	CA	LYS	A	441	32.969	33.788	69.187	1.00	21.01		C
ANISOU	323	CA	LYS	A	441	2695	2660	2628	-30	16	-109	C
ATOM	324	C	LYS	A	441	31.985	34.146	70.277	1.00	20.16		C
ANISOU	324	C	LYS	A	441	2600	2481	2578	-113	34	-23	C
ATOM	325	O	LYS	A	441	32.310	34.937	71.190	1.00	20.20		O
ANISOU	325	O	LYS	A	441	2843	2418	2416	-5	-152	166	O
ATOM	326	CB	LYS	A	441	33.190	34.975	68.233	1.00	23.03		C
ANISOU	326	CB	LYS	A	441	3250	2780	2721	-106	9	-41	C
ATOM	327	CG	LYS	A	441	34.500	34.788	67.425	1.00	26.36		C
ANISOU	327	CG	LYS	A	441	3129	3556	3331	-82	24	-118	C
ATOM	328	CD	LYS	A	441	34.588	36.012	66.540	1.00	30.45		C
ANISOU	328	CD	LYS	A	441	4080	3816	3675	-46	-53	102	C
ATOM	329	CE	LYS	A	441	35.842	36.256	65.744	1.00	33.52		C
ANISOU	329	CE	LYS	A	441	4141	4332	4262	19	58	49	C
ATOM	330	NZ	LYS	A	441	35.868	37.745	65.450	1.00	35.91		N
ANISOU	330	NZ	LYS	A	441	4740	4423	4480	-115	13	200	N

ATOM	331	N	THR	A	442	30.747	33.575	70.269	1.00	18.17		N
ANISOU	331	N	THR	A	442	2284	2270	2351	137	149	-65	N
ATOM	332	CA	THR	A	442	29.833	33.861	71.383	1.00	17.18		C
ANISOU	332	CA	THR	A	442	2409	1884	2237	18	106	-101	C
ATOM	333	C	THR	A	442	30.334	33.146	72.634	1.00	16.91		C
ANISOU	333	C	THR	A	442	2248	1942	2236	-42	130	-14	C
ATOM	334	O	THR	A	442	29.800	33.382	73.738	1.00	17.17		O
ANISOU	334	O	THR	A	442	2627	1783	2114	-60	151	53	O
ATOM	335	CB	THR	A	442	28.360	33.521	71.114	1.00	16.82		C
ANISOU	335	CB	THR	A	442	2340	1792	2258	59	8	6	C
ATOM	336	OG1	THR	A	442	28.140	32.089	71.013	1.00	17.59		O
ANISOU	336	OG1	THR	A	442	2466	1836	2382	-53	121	189	O
ATOM	337	CG2	THR	A	442	27.887	34.234	69.832	1.00	18.39		C
ANISOU	337	CG2	THR	A	442	2507	2362	2116	-31	117	96	C
ATOM	338	N	LEU	A	443	31.319	32.255	72.548	1.00	16.60		N
ANISOU	338	N	LEU	A	443	2351	1803	2154	-60	30	-2	N
ATOM	339	CA	LEU	A	443	31.910	31.625	73.715	1.00	17.07		C
ANISOU	339	CA	LEU	A	443	2333	1914	2240	-32	-87	-1	C
ATOM	340	C	LEU	A	443	33.094	32.445	74.273	1.00	17.58		C
ANISOU	340	C	LEU	A	443	2376	2064	2239	-107	-4	-12	C
ATOM	341	O	LEU	A	443	33.661	32.059	75.292	1.00	17.55		O
ANISOU	341	O	LEU	A	443	2259	2037	2371	-152	-66	-82	O
ATOM	342	CB	LEU	A	443	32.463	30.205	73.358	1.00	16.65		C
ANISOU	342	CB	LEU	A	443	2336	1860	2131	-40	-109	52	C
ATOM	343	CG	LEU	A	443	31.329	29.177	73.206	1.00	15.42		C
ANISOU	343	CG	LEU	A	443	2151	1866	1839	74	-50	-14	C
ATOM	344	CD1	LEU	A	443	31.840	27.988	72.401	1.00	16.51		C
ANISOU	344	CD1	LEU	A	443	2345	1676	2250	-2	-58	-104	C
ATOM	345	CD2	LEU	A	443	30.799	28.717	74.570	1.00	17.06		C
ANISOU	345	CD2	LEU	A	443	2415	2020	2046	-251	29	65	C
ATOM	346	N	ALA	A	444	33.470	33.527	73.598	1.00	17.62		N
ANISOU	346	N	ALA	A	444	2326	1928	2440	-68	21	-85	N
ATOM	347	CA	ALA	A	444	34.556	34.360	74.105	1.00	17.07		C
ANISOU	347	CA	ALA	A	444	2325	1896	2263	-9	0	-52	C
ATOM	348	C	ALA	A	444	34.158	34.904	75.463	1.00	17.32		C
ANISOU	348	C	ALA	A	444	2281	1987	2313	-64	-11	-174	C
ATOM	349	O	ALA	A	444	32.971	34.984	75.854	1.00	16.91		O
ANISOU	349	O	ALA	A	444	2223	1714	2488	-248	67	-154	O
ATOM	350	CB	ALA	A	444	34.842	35.452	73.087	1.00	17.28		C
ANISOU	350	CB	ALA	A	444	2179	2112	2272	-272	109	-37	C
ATOM	351	N	PRO	A	445	35.137	35.368	76.250	1.00	16.22		N
ANISOU	351	N	PRO	A	445	2052	1897	2214	-188	107	-128	N
ATOM	352	CA	PRO	A	445	34.786	35.874	77.559	1.00	15.65		C
ANISOU	352	CA	PRO	A	445	1914	1784	2246	-142	45	-105	C
ATOM	353	C	PRO	A	445	33.720	36.952	77.505	1.00	16.92		C
ANISOU	353	C	PRO	A	445	2006	2087	2335	-85	70	-74	C
ATOM	354	O	PRO	A	445	33.726	37.891	76.691	1.00	17.87		O
ANISOU	354	O	PRO	A	445	2256	1821	2715	-64	76	-100	O
ATOM	355	CB	PRO	A	445	36.135	36.426	78.076	1.00	18.07		C
ANISOU	355	CB	PRO	A	445	1973	2091	2802	-181	-144	-249	C
ATOM	356	CG	PRO	A	445	37.154	35.585	77.372	1.00	20.04		C
ANISOU	356	CG	PRO	A	445	2378	2661	2575	15	-1	-296	C
ATOM	357	CD	PRO	A	445	36.592	35.356	75.986	1.00	19.05		C
ANISOU	357	CD	PRO	A	445	2010	2515	2712	-155	-149	-187	C
ATOM	358	N	ARG	A	446	32.799	36.895	78.445	1.00	16.51		N
ANISOU	358	N	ARG	A	446	1952	1954	2367	-169	51	-34	N
ATOM	359	CA	ARG	A	446	31.738	37.892	78.659	1.00	16.52		C
ANISOU	359	CA	ARG	A	446	2082	1884	2312	-18	31	3	C
ATOM	360	C	ARG	A	446	30.707	37.967	77.542	1.00	18.18		C
ANISOU	360	C	ARG	A	446	2455	2151	2302	3	-50	-38	C
ATOM	361	O	ARG	A	446	29.800	38.854	77.560	1.00	19.83		O
ANISOU	361	O	ARG	A	446	2447	2435	2653	322	95	-144	O
ATOM	362	CB	ARG	A	446	32.354	39.302	78.904	1.00	18.67		C
ANISOU	362	CB	ARG	A	446	2584	1873	2638	-46	-139	-11	C

20250424 14:33:50

ATOM	363	CG	ARG	A	446	33.233	39.352	80.164	1.00	19.18		C
ANISOU	363	CG	ARG	A	446	2624	2013	2649	-256	-95	136	C
ATOM	364	CD	ARG	A	446	33.825	40.761	80.413	1.00	21.48		C
ANISOU	364	CD	ARG	A	446	3307	1870	2983	-217	112	-27	C
ATOM	365	NE	ARG	A	446	34.445	40.745	81.772	1.00	24.17		N
ANISOU	365	NE	ARG	A	446	3506	2312	3366	-393	-36	-98	N
ATOM	366	CZ	ARG	A	446	33.579	41.237	82.720	1.00	26.50		C
ANISOU	366	CZ	ARG	A	446	3650	2911	3507	-271	109	-165	C
ATOM	367	NH1	ARG	A	446	32.341	41.809	82.594	1.00	27.49		N
ANISOU	367	NH1	ARG	A	446	3540	3097	3809	-527	31	-60	N
ATOM	368	NH2	ARG	A	446	34.141	41.150	83.892	1.00	27.19		N
ANISOU	368	NH2	ARG	A	446	3631	3046	3654	-92	132	179	N
ATOM	369	N	ARG	A	447	30.739	37.078	76.546	1.00	17.24		N
ANISOU	369	N	ARG	A	447	2395	1882	2274	-133	42	56	N
ATOM	370	CA	ARG	A	447	29.759	37.166	75.475	1.00	17.00		C
ANISOU	370	CA	ARG	A	447	2288	1975	2197	20	89	44	C
ATOM	371	C	ARG	A	447	28.527	36.318	75.630	1.00	17.43		C
ANISOU	371	C	ARG	A	447	2509	1923	2191	-78	-31	138	C
ATOM	372	O	ARG	A	447	28.527	35.277	76.306	1.00	17.13		O
ANISOU	372	O	ARG	A	447	2492	1791	2225	-80	98	190	O
ATOM	373	CB	ARG	A	447	30.422	36.761	74.134	1.00	16.08		C
ANISOU	373	CB	ARG	A	447	2170	1875	2065	1	67	88	C
ATOM	374	CG	ARG	A	447	31.620	37.628	73.746	1.00	19.23		C
ANISOU	374	CG	ARG	A	447	2503	2150	2653	-127	85	139	C
ATOM	375	CD	ARG	A	447	31.181	39.084	73.539	1.00	20.07		C
ANISOU	375	CD	ARG	A	447	2568	2248	2811	-40	103	217	C
ATOM	376	NE	ARG	A	447	32.400	39.818	73.119	1.00	21.14		N
ANISOU	376	NE	ARG	A	447	2589	2668	2774	-259	61	-3	N
ATOM	377	CZ	ARG	A	447	32.351	41.098	72.718	1.00	22.82		C
ANISOU	377	CZ	ARG	A	447	3041	2717	2911	-130	36	41	C
ATOM	378	NH1	ARG	A	447	31.207	41.771	72.687	1.00	23.52		N
ANISOU	378	NH1	ARG	A	447	3130	2784	3022	-93	124	37	N
ATOM	379	NH2	ARG	A	447	33.497	41.683	72.324	1.00	23.53		N
ANISOU	379	NH2	ARG	A	447	2965	2843	3133	-91	7	-139	N
ATOM	380	N	TRP	A	448	27.415	36.853	75.135	1.00	16.90		N
ANISOU	380	N	TRP	A	448	2153	1985	2283	-4	82	-5	N
ATOM	381	CA	TRP	A	448	26.139	36.105	75.144	1.00	16.65		C
ANISOU	381	CA	TRP	A	448	2251	2000	2075	13	-11	111	C
ATOM	382	C	TRP	A	448	26.161	34.924	74.171	1.00	17.62		C
ANISOU	382	C	TRP	A	448	2375	1998	2321	-5	25	47	C
ATOM	383	O	TRP	A	448	26.341	35.113	72.966	1.00	18.85		O
ANISOU	383	O	TRP	A	448	2476	2141	2544	197	299	108	O
ATOM	384	CB	TRP	A	448	25.059	37.124	74.759	1.00	16.46		C
ANISOU	384	CB	TRP	A	448	2329	1818	2108	75	127	68	C
ATOM	385	CG	TRP	A	448	24.692	38.108	75.831	1.00	17.23		C
ANISOU	385	CG	TRP	A	448	2464	1978	2105	-35	66	36	C
ATOM	386	CD1	TRP	A	448	25.421	38.548	76.901	1.00	16.52		C
ANISOU	386	CD1	TRP	A	448	2378	1786	2114	14	48	126	C
ATOM	387	CD2	TRP	A	448	23.428	38.829	75.843	1.00	16.62		C
ANISOU	387	CD2	TRP	A	448	2343	1782	2192	-25	148	214	C
ATOM	388	NE1	TRP	A	448	24.664	39.464	77.618	1.00	17.52		N
ANISOU	388	NE1	TRP	A	448	2334	2051	2272	58	274	166	N
ATOM	389	CE2	TRP	A	448	23.462	39.655	76.975	1.00	17.28		C
ANISOU	389	CE2	TRP	A	448	2356	1877	2332	38	201	121	C
ATOM	390	CE3	TRP	A	448	22.302	38.782	75.006	1.00	17.96		C
ANISOU	390	CE3	TRP	A	448	2376	1876	2572	-7	122	291	C
ATOM	391	CZ2	TRP	A	448	22.379	40.488	77.337	1.00	17.68		C
ANISOU	391	CZ2	TRP	A	448	2372	2030	2315	84	284	81	C
ATOM	392	CZ3	TRP	A	448	21.223	39.618	75.358	1.00	19.21		C
ANISOU	392	CZ3	TRP	A	448	2588	2177	2535	154	134	174	C
ATOM	393	CH2	TRP	A	448	21.295	40.416	76.504	1.00	19.95		C
ANISOU	393	CH2	TRP	A	448	2647	2252	2683	117	76	45	C
ATOM	394	N	LEU	A	449	25.823	33.707	74.664	1.00	16.41		N
ANISOU	394	N	LEU	A	449	2220	1911	2103	31	72	2	N

20250424 14:49:56

ATOM	395	CA	LEU	A	449	25.751	32.578	73.733	1.00	16.20		C
ANISOU	395	CA	LEU	A	449	2162	1714	2279	-26	51	77	C
ATOM	396	C	LEU	A	449	24.570	32.754	72.780	1.00	16.48		C
ANISOU	396	C	LEU	A	449	2348	1821	2094	9	65	193	C
ATOM	397	O	LEU	A	449	23.498	33.282	73.158	1.00	16.82		O
ANISOU	397	O	LEU	A	449	2357	1897	2138	9	191	253	O
ATOM	398	CB	LEU	A	449	25.499	31.216	74.415	1.00	18.25		C
ANISOU	398	CB	LEU	A	449	2484	1985	2467	45	26	309	C
ATOM	399	CG	LEU	A	449	26.444	30.771	75.511	1.00	20.89		C
ANISOU	399	CG	LEU	A	449	2977	2293	2668	12	-206	286	C
ATOM	400	CD1	LEU	A	449	26.437	29.257	75.726	1.00	19.38		C
ANISOU	400	CD1	LEU	A	449	2722	2166	2474	124	189	256	C
ATOM	401	CD2	LEU	A	449	27.770	31.407	75.583	1.00	20.64		C
ANISOU	401	CD2	LEU	A	449	2591	2473	2777	287	4	525	C
ATOM	402	N	ASN	A	450	24.755	32.215	71.570	1.00	16.37		N
ANISOU	402	N	ASN	A	450	2335	1977	1909	-97	-33	213	N
ATOM	403	CA	ASN	A	450	23.617	32.195	70.626	1.00	16.97		C
ANISOU	403	CA	ASN	A	450	2214	2144	2090	-234	2	149	C
ATOM	404	C	ASN	A	450	23.064	30.771	70.543	1.00	17.29		C
ANISOU	404	C	ASN	A	450	2329	1957	2283	3	-42	70	C
ATOM	405	O	ASN	A	450	23.514	29.804	71.181	1.00	17.29		O
ANISOU	405	O	ASN	A	450	2425	2156	1988	-210	103	340	O
ATOM	406	CB	ASN	A	450	23.975	32.743	69.256	1.00	18.47		C
ANISOU	406	CB	ASN	A	450	2545	2410	2063	-22	114	146	C
ATOM	407	CG	ASN	A	450	24.845	31.821	68.444	1.00	18.73		C
ANISOU	407	CG	ASN	A	450	2422	2412	2281	-13	254	238	C
ATOM	408	OD1	ASN	A	450	25.269	30.731	68.840	1.00	18.52		O
ANISOU	408	OD1	ASN	A	450	2358	2427	2254	-27	104	172	O
ATOM	409	ND2	ASN	A	450	25.140	32.369	67.258	1.00	18.94		N
ANISOU	409	ND2	ASN	A	450	2542	2653	2001	-85	151	203	N
ATOM	410	N	ASP	A	451	22.010	30.650	69.740	1.00	16.71		N
ANISOU	410	N	ASP	A	451	2313	2006	2029	-86	53	-7	N
ATOM	411	CA	ASP	A	451	21.294	29.362	69.628	1.00	18.13		C
ANISOU	411	CA	ASP	A	451	2292	2124	2473	-48	66	-59	C
ATOM	412	C	ASP	A	451	22.162	28.253	69.066	1.00	18.12		C
ANISOU	412	C	ASP	A	451	2461	2210	2213	-31	-7	-51	C
ATOM	413	O	ASP	A	451	21.901	27.089	69.356	1.00	17.38		O
ANISOU	413	O	ASP	A	451	2498	2203	1904	-9	77	111	O
ATOM	414	CB	ASP	A	451	20.045	29.564	68.761	1.00	20.04		C
ANISOU	414	CB	ASP	A	451	2600	2647	2367	-27	-12	58	C
ATOM	415	CG	ASP	A	451	20.408	30.031	67.341	1.00	21.13		C
ANISOU	415	CG	ASP	A	451	2799	2721	2507	-15	54	115	C
ATOM	416	OD1	ASP	A	451	20.501	31.259	67.145	1.00	21.53		O
ANISOU	416	OD1	ASP	A	451	2841	2714	2626	6	-9	133	O
ATOM	417	OD2	ASP	A	451	20.625	29.148	66.500	1.00	21.94		O
ANISOU	417	OD2	ASP	A	451	3021	2743	2575	-29	-103	39	O
ATOM	418	N	THR	A	452	23.146	28.570	68.237	1.00	17.61		N
ANISOU	418	N	THR	A	452	2184	2145	2364	9	19	-3	N
ATOM	419	CA	THR	A	452	24.010	27.552	67.636	1.00	17.98		C
ANISOU	419	CA	THR	A	452	2468	2252	2113	-41	144	-106	C
ATOM	420	C	THR	A	452	24.854	26.844	68.653	1.00	17.29		C
ANISOU	420	C	THR	A	452	2412	2199	1958	-97	242	-76	C
ATOM	421	O	THR	A	452	24.979	25.617	68.675	1.00	17.49		O
ANISOU	421	O	THR	A	452	2619	2167	1860	20	82	-265	O
ATOM	422	CB	THR	A	452	24.927	28.219	66.582	1.00	18.78		C
ANISOU	422	CB	THR	A	452	2403	2352	2379	-20	156	109	C
ATOM	423	OG1	THR	A	452	24.088	29.014	65.715	1.00	21.03		O
ANISOU	423	OG1	THR	A	452	2868	2760	2364	170	37	107	O
ATOM	424	CG2	THR	A	452	25.681	27.149	65.829	1.00	17.83		C
ANISOU	424	CG2	THR	A	452	2391	2303	2081	-118	-51	20	C
ATOM	425	N	ILE	A	453	25.409	27.621	69.597	1.00	17.00		N
ANISOU	425	N	ILE	A	453	2383	2146	1932	-12	39	-57	N
ATOM	426	CA	ILE	A	453	26.202	27.037	70.678	1.00	16.62		C
ANISOU	426	CA	ILE	A	453	2135	2182	1998	-137	3	26	C

ATOM	427	C	ILE	A	453	25.319	26.242	71.631	1.00	15.53		C
ANISOU	427	C	ILE	A	453	2092	2103	1705	37	10	-45	C
ATOM	428	O	ILE	A	453	25.675	25.148	72.069	1.00	16.87		O
ANISOU	428	O	ILE	A	453	2307	2095	2006	-66	92	4	O
ATOM	429	CB	ILE	A	453	27.012	28.127	71.415	1.00	15.67		C
ANISOU	429	CB	ILE	A	453	2109	1918	1927	-84	74	52	C
ATOM	430	CG1	ILE	A	453	27.941	28.842	70.404	1.00	16.39		C
ANISOU	430	CG1	ILE	A	453	2156	2103	1970	-73	107	-45	C
ATOM	431	CG2	ILE	A	453	27.780	27.454	72.545	1.00	16.95		C
ANISOU	431	CG2	ILE	A	453	2183	2332	1923	29	-87	-101	C
ATOM	432	CD1	ILE	A	453	28.868	27.950	69.578	1.00	17.17		C
ANISOU	432	CD1	ILE	A	453	2361	2131	2034	31	129	-48	C
ATOM	433	N	ILE	A	454	24.133	26.778	71.985	1.00	16.23		N
ANISOU	433	N	ILE	A	454	2058	2309	1801	31	123	-109	N
ATOM	434	CA	ILE	A	454	23.193	26.021	72.822	1.00	16.62		C
ANISOU	434	CA	ILE	A	454	2283	1992	2041	-18	54	-31	C
ATOM	435	C	ILE	A	454	22.830	24.702	72.114	1.00	17.03		C
ANISOU	435	C	ILE	A	454	2193	2045	2234	-92	81	-41	C
ATOM	436	O	ILE	A	454	22.891	23.656	72.787	1.00	16.67		O
ANISOU	436	O	ILE	A	454	2264	1963	2107	-34	174	-102	O
ATOM	437	CB	ILE	A	454	21.894	26.853	73.011	1.00	17.04		C
ANISOU	437	CB	ILE	A	454	2153	2215	2105	-64	127	7	C
ATOM	438	CG1	ILE	A	454	22.190	28.126	73.809	1.00	18.96		C
ANISOU	438	CG1	ILE	A	454	2510	2180	2512	-73	22	-2	C
ATOM	439	CG2	ILE	A	454	20.810	25.981	73.661	1.00	17.94		C
ANISOU	439	CG2	ILE	A	454	2037	2285	2496	21	226	46	C
ATOM	440	CD1	ILE	A	454	22.608	27.891	75.239	1.00	20.59		C
ANISOU	440	CD1	ILE	A	454	2780	2440	2603	-43	-5	112	C
ATOM	441	N	GLU	A	455	22.571	24.722	70.813	1.00	17.22		N
ANISOU	441	N	GLU	A	455	2228	2031	2283	-15	31	33	N
ATOM	442	CA	GLU	A	455	22.177	23.478	70.134	1.00	18.12		C
ANISOU	442	CA	GLU	A	455	2238	2312	2337	3	25	-68	C
ATOM	443	C	GLU	A	455	23.338	22.478	70.115	1.00	19.31		C
ANISOU	443	C	GLU	A	455	2423	2399	2513	-49	-1	57	C
ATOM	444	O	GLU	A	455	23.156	21.284	70.345	1.00	19.67		O
ANISOU	444	O	GLU	A	455	2602	2216	2654	72	-57	-124	O
ATOM	445	CB	GLU	A	455	21.698	23.761	68.713	1.00	19.41		C
ANISOU	445	CB	GLU	A	455	2682	2388	2306	-73	-32	-33	C
ATOM	446	CG	GLU	A	455	21.251	22.457	68.040	1.00	21.19		C
ANISOU	446	CG	GLU	A	455	2963	2470	2619	3	-10	-185	C
ATOM	447	CD	GLU	A	455	20.417	22.586	66.803	1.00	22.79		C
ANISOU	447	CD	GLU	A	455	2987	2925	2748	-18	-34	-157	C
ATOM	448	OE1	GLU	A	455	20.242	23.696	66.274	1.00	23.95		O
ANISOU	448	OE1	GLU	A	455	3301	2994	2804	-97	-66	-171	O
ATOM	449	OE2	GLU	A	455	19.885	21.537	66.393	1.00	23.35		O
ANISOU	449	OE2	GLU	A	455	3067	3011	2796	-30	-122	-346	O
ATOM	450	N	PHE	A	456	24.534	23.010	69.840	1.00	18.48		N
ANISOU	450	N	PHE	A	456	2280	2217	2525	55	160	-114	N
ATOM	451	CA	PHE	A	456	25.708	22.117	69.855	1.00	16.99		C
ANISOU	451	CA	PHE	A	456	1926	2110	2421	-34	-87	-69	C
ATOM	452	C	PHE	A	456	25.801	21.417	71.207	1.00	17.77		C
ANISOU	452	C	PHE	A	456	2112	2216	2426	-75	-39	-21	C
ATOM	453	O	PHE	A	456	26.034	20.189	71.267	1.00	17.72		O
ANISOU	453	O	PHE	A	456	2169	2172	2390	-14	131	-59	O
ATOM	454	CB	PHE	A	456	27.038	22.894	69.617	1.00	17.46		C
ANISOU	454	CB	PHE	A	456	2094	1977	2561	-25	-30	-76	C
ATOM	455	CG	PHE	A	456	28.233	22.020	69.912	1.00	18.81		C
ANISOU	455	CG	PHE	A	456	2537	2248	2363	85	5	-103	C
ATOM	456	CD1	PHE	A	456	28.627	21.018	69.041	1.00	19.99		C
ANISOU	456	CD1	PHE	A	456	2549	2399	2647	164	-32	-139	C
ATOM	457	CD2	PHE	A	456	28.912	22.152	71.109	1.00	17.34		C
ANISOU	457	CD2	PHE	A	456	1873	2165	2550	116	-70	-27	C
ATOM	458	CE1	PHE	A	456	29.701	20.207	69.339	1.00	21.78		C
ANISOU	458	CE1	PHE	A	456	2865	2632	2778	152	-135	-83	C

ATOM	459	CE2	PHE	A	456	30.007	21.367	71.441	1.00	18.50		C
ANISOU	459	CE2	PHE	A	456	2489	2110	2429	92	47	5	C
ATOM	460	CZ	PHE	A	456	30.376	20.381	70.544	1.00	20.03		C
ANISOU	460	CZ	PHE	A	456	2484	2431	2696	202	49	-140	C
ATOM	461	N	PHE	A	457	25.649	22.147	72.309	1.00	17.68		N
ANISOU	461	N	PHE	A	457	2221	2042	2455	22	-99	-16	N
ATOM	462	CA	PHE	A	457	25.779	21.509	73.619	1.00	17.30		C
ANISOU	462	CA	PHE	A	457	2163	2083	2327	-67	-8	-1	C
ATOM	463	C	PHE	A	457	24.667	20.504	73.902	1.00	17.52		C
ANISOU	463	C	PHE	A	457	2224	2034	2401	-6	-66	-152	C
ATOM	464	O	PHE	A	457	24.959	19.421	74.436	1.00	17.26		O
ANISOU	464	O	PHE	A	457	2118	2119	2319	45	-4	-80	O
ATOM	465	CB	PHE	A	457	25.939	22.527	74.752	1.00	18.77		C
ANISOU	465	CB	PHE	A	457	2526	2129	2476	119	-52	-120	C
ATOM	466	CG	PHE	A	457	26.522	21.867	75.981	1.00	18.03		C
ANISOU	466	CG	PHE	A	457	2197	2162	2490	112	25	-130	C
ATOM	467	CD1	PHE	A	457	27.910	21.562	75.985	1.00	18.56		C
ANISOU	467	CD1	PHE	A	457	2185	2403	2465	-149	33	29	C
ATOM	468	CD2	PHE	A	457	25.743	21.538	77.054	1.00	18.50		C
ANISOU	468	CD2	PHE	A	457	2685	1997	2349	14	-56	-28	C
ATOM	469	CE1	PHE	A	457	28.437	20.917	77.096	1.00	17.93		C
ANISOU	469	CE1	PHE	A	457	2126	2104	2582	-131	-59	-38	C
ATOM	470	CE2	PHE	A	457	26.273	20.898	78.174	1.00	18.60		C
ANISOU	470	CE2	PHE	A	457	2472	2173	2420	125	-115	-157	C
ATOM	471	CZ	PHE	A	457	27.608	20.582	78.178	1.00	18.40		C
ANISOU	471	CZ	PHE	A	457	2452	2132	2409	-240	-78	-176	C
ATOM	472	N	MET	A	458	23.474	20.772	73.430	1.00	16.73		N
ANISOU	472	N	MET	A	458	2215	1843	2297	87	31	-239	N
ATOM	473	CA	MET	A	458	22.376	19.810	73.550	1.00	16.99		C
ANISOU	473	CA	MET	A	458	2174	1730	2552	85	40	-213	C
ATOM	474	C	MET	A	458	22.774	18.520	72.788	1.00	17.29		C
ANISOU	474	C	MET	A	458	2150	1938	2482	100	96	-291	C
ATOM	475	O	MET	A	458	22.569	17.419	73.319	1.00	19.89		O
ANISOU	475	O	MET	A	458	2409	2255	2893	24	-70	-115	O
ATOM	476	CB	MET	A	458	21.054	20.373	73.014	1.00	16.73		C
ANISOU	476	CB	MET	A	458	2411	1892	2055	156	-29	-197	C
ATOM	477	CG	MET	A	458	20.554	21.631	73.744	1.00	17.55		C
ANISOU	477	CG	MET	A	458	2396	1712	2561	76	142	-111	C
ATOM	478	SD	MET	A	458	20.296	21.390	75.504	1.00	17.18		S
ANISOU	478	SD	MET	A	458	2306	1587	2633	-60	230	-71	S
ATOM	479	CE	MET	A	458	21.743	22.189	76.188	1.00	19.31		C
ANISOU	479	CE	MET	A	458	2814	2040	2482	-237	38	-208	C
ATOM	480	N	LYS	A	459	23.329	18.660	71.604	1.00	17.26		N
ANISOU	480	N	LYS	A	459	2356	1811	2392	186	-64	-198	N
ATOM	481	CA	LYS	A	459	23.750	17.460	70.828	1.00	19.22		C
ANISOU	481	CA	LYS	A	459	2632	2005	2665	152	72	-251	C
ATOM	482	C	LYS	A	459	24.822	16.681	71.551	1.00	20.55		C
ANISOU	482	C	LYS	A	459	2568	2368	2871	24	-100	-94	C
ATOM	483	O	LYS	A	459	24.834	15.431	71.585	1.00	22.61		O
ANISOU	483	O	LYS	A	459	2828	2342	3423	117	-89	-148	O
ATOM	484	CB	LYS	A	459	24.269	17.893	69.449	1.00	20.32		C
ANISOU	484	CB	LYS	A	459	2664	2381	2676	325	187	-201	C
ATOM	485	CG	LYS	A	459	23.133	18.323	68.503	1.00	24.79		C
ANISOU	485	CG	LYS	A	459	2792	3252	3376	249	-70	-17	C
ATOM	486	CD	LYS	A	459	22.501	17.176	67.749	1.00	30.15		C
ANISOU	486	CD	LYS	A	459	3840	3746	3871	10	-90	-200	C
ATOM	487	CE	LYS	A	459	21.777	17.804	66.526	1.00	32.80		C
ANISOU	487	CE	LYS	A	459	3972	4352	4140	233	-87	13	C
ATOM	488	NZ	LYS	A	459	21.337	16.664	65.686	1.00	35.13		N
ANISOU	488	NZ	LYS	A	459	4317	4691	4339	-1	-12	-136	N
ATOM	489	N	TYR	A	460	25.790	17.411	72.123	1.00	19.93		N
ANISOU	489	N	TYR	A	460	2247	2284	3042	121	13	-187	N
ATOM	490	CA	TYR	A	460	26.836	16.734	72.895	1.00	19.98		C
ANISOU	490	CA	TYR	A	460	2643	2222	2726	40	-57	-28	C

ATOM	491	C	TYR	A	460	26.267	15.906	74.054	1.00	20.30		C
ANISOU	491	C	TYR	A	460	2451	2387	2873	96	182	-33	C
ATOM	492	O	TYR	A	460	26.725	14.793	74.371	1.00	20.01		O
ANISOU	492	O	TYR	A	460	2590	2152	2860	70	-39	-153	O
ATOM	493	CB	TYR	A	460	27.835	17.786	73.370	1.00	18.90		C
ANISOU	493	CB	TYR	A	460	2106	2345	2730	97	156	-181	C
ATOM	494	CG	TYR	A	460	28.779	17.336	74.450	1.00	20.69		C
ANISOU	494	CG	TYR	A	460	2703	2332	2826	-30	45	2	C
ATOM	495	CD1	TYR	A	460	29.878	16.512	74.164	1.00	20.73		C
ANISOU	495	CD1	TYR	A	460	2584	2306	2988	-27	70	43	C
ATOM	496	CD2	TYR	A	460	28.596	17.700	75.760	1.00	20.86		C
ANISOU	496	CD2	TYR	A	460	2665	2439	2824	-123	99	26	C
ATOM	497	CE1	TYR	A	460	30.755	16.081	75.156	1.00	21.90		C
ANISOU	497	CE1	TYR	A	460	2809	2506	3007	-192	-57	25	C
ATOM	498	CE2	TYR	A	460	29.428	17.277	76.762	1.00	22.47		C
ANISOU	498	CE2	TYR	A	460	2771	2720	3048	-87	-61	130	C
ATOM	499	CZ	TYR	A	460	30.511	16.472	76.452	1.00	22.05		C
ANISOU	499	CZ	TYR	A	460	2864	2592	2923	-153	19	149	C
ATOM	500	OH	TYR	A	460	31.355	16.099	77.467	1.00	24.73		O
ANISOU	500	OH	TYR	A	460	3230	3004	3162	-161	-142	321	O
ATOM	501	N	ILE	A	461	25.329	16.459	74.820	1.00	19.01		N
ANISOU	501	N	ILE	A	461	2697	2140	2385	54	99	-166	N
ATOM	502	CA	ILE	A	461	24.677	15.743	75.910	1.00	19.87		C
ANISOU	502	CA	ILE	A	461	2559	2227	2761	51	304	-134	C
ATOM	503	C	ILE	A	461	23.874	14.573	75.357	1.00	20.86		C
ANISOU	503	C	ILE	A	461	2656	2363	2909	-26	78	-52	C
ATOM	504	O	ILE	A	461	24.009	13.468	75.890	1.00	22.24		O
ANISOU	504	O	ILE	A	461	2661	2482	3309	-134	-89	96	O
ATOM	505	CB	ILE	A	461	23.722	16.752	76.628	1.00	18.84		C
ANISOU	505	CB	ILE	A	461	2628	2107	2425	55	265	-100	C
ATOM	506	CG1	ILE	A	461	24.586	17.730	77.448	1.00	18.90		C
ANISOU	506	CG1	ILE	A	461	2579	1924	2679	36	272	-37	C
ATOM	507	CG2	ILE	A	461	22.790	15.936	77.513	1.00	20.87		C
ANISOU	507	CG2	ILE	A	461	2770	2407	2752	-70	467	-178	C
ATOM	508	CD1	ILE	A	461	25.508	17.178	78.498	1.00	20.48		C
ANISOU	508	CD1	ILE	A	461	3146	2476	2160	-241	58	-364	C
ATOM	509	N	GLU	A	462	23.211	14.742	74.214	1.00	21.71		N
ANISOU	509	N	GLU	A	462	2891	2274	3082	88	-116	-169	N
ATOM	510	CA	GLU	A	462	22.502	13.576	73.646	1.00	24.28		C
ANISOU	510	CA	GLU	A	462	3130	2683	3412	-181	-213	-64	C
ATOM	511	C	GLU	A	462	23.526	12.506	73.263	1.00	26.65		C
ANISOU	511	C	GLU	A	462	3576	2961	3588	78	-124	-114	C
ATOM	512	O	GLU	A	462	23.205	11.319	73.478	1.00	29.22		O
ANISOU	512	O	GLU	A	462	3975	3011	4116	7	-214	-11	O
ATOM	513	CB	GLU	A	462	21.823	13.963	72.333	1.00	25.44		C
ANISOU	513	CB	GLU	A	462	3354	3083	3228	-14	-77	-138	C
ATOM	514	CG	GLU	A	462	20.526	14.677	72.576	1.00	26.27		C
ANISOU	514	CG	GLU	A	462	3280	3410	3290	31	59	-94	C
ATOM	515	CD	GLU	A	462	19.792	15.049	71.300	1.00	26.77		C
ANISOU	515	CD	GLU	A	462	3197	3557	3418	73	5	-102	C
ATOM	516	OE1	GLU	A	462	20.493	15.311	70.292	1.00	28.84		O
ANISOU	516	OE1	GLU	A	462	3595	3920	3444	107	100	-16	O
ATOM	517	OE2	GLU	A	462	18.555	15.113	71.317	1.00	23.89		O
ANISOU	517	OE2	GLU	A	462	3043	3045	2989	-182	76	-328	O
ATOM	518	N	LYS	A	463	24.594	12.909	72.601	1.00	27.04		N
ANISOU	518	N	LYS	A	463	3545	2988	3739	118	-161	-179	N
ATOM	519	CA	LYS	A	463	25.637	11.933	72.195	1.00	30.01		C
ANISOU	519	CA	LYS	A	463	3917	3383	4101	288	-71	-280	C
ATOM	520	C	LYS	A	463	26.201	11.198	73.389	1.00	30.47		C
ANISOU	520	C	LYS	A	463	4046	3525	4005	184	-29	-198	C
ATOM	521	O	LYS	A	463	26.547	10.001	73.229	1.00	31.93		O
ANISOU	521	O	LYS	A	463	4310	3516	4306	343	-65	-221	O
ATOM	522	CB	LYS	A	463	26.724	12.649	71.406	1.00	32.61		C
ANISOU	522	CB	LYS	A	463	4146	3926	4320	130	-15	-89	C

ATOM	523	CG	LYS	A	463	27.867	11.853	70.769	1.00	35.79		C
ANISOU	523	CG	LYS	A	463	4441	4407	4751	236	97	-107	C
ATOM	524	CD	LYS	A	463	27.330	11.030	69.607	1.00	38.85		C
ANISOU	524	CD	LYS	A	463	4993	4924	4844	-8	-63	-111	C
ATOM	525	CE	LYS	A	463	28.424	10.101	69.083	1.00	40.78		C
ANISOU	525	CE	LYS	A	463	5246	5073	5175	94	60	-62	C
ATOM	526	NZ	LYS	A	463	28.029	9.599	67.739	1.00	42.97		N
ANISOU	526	NZ	LYS	A	463	5490	5561	5273	-22	-37	-72	N
ATOM	527	N	SER	A	464	26.359	11.762	74.584	1.00	29.67		N
ANISOU	527	N	SER	A	464	3934	3407	3931	284	-28	-184	N
ATOM	528	CA	SER	A	464	26.973	11.055	75.698	1.00	28.97		C
ANISOU	528	CA	SER	A	464	3755	3459	3792	237	56	-200	C
ATOM	529	C	SER	A	464	26.113	10.521	76.816	1.00	29.16		C
ANISOU	529	C	SER	A	464	3700	3427	3952	-1	-87	-65	C
ATOM	530	O	SER	A	464	26.582	10.097	77.901	1.00	28.24		O
ANISOU	530	O	SER	A	464	3542	3062	4126	84	26	249	O
ATOM	531	CB	SER	A	464	28.026	12.035	76.245	1.00	29.78		C
ANISOU	531	CB	SER	A	464	3809	3659	3848	160	-75	-132	C
ATOM	532	OG	SER	A	464	27.431	13.251	76.610	1.00	29.52		O
ANISOU	532	OG	SER	A	464	3868	3550	3798	152	-229	17	O
ATOM	533	N	THR	A	465	24.793	10.647	76.656	1.00	28.41		N
ANISOU	533	N	THR	A	465	3630	3105	4060	235	-16	-158	N
ATOM	534	CA	THR	A	465	23.874	10.237	77.705	1.00	29.04		C
ANISOU	534	CA	THR	A	465	3807	3263	3964	36	-79	-9	C
ATOM	535	C	THR	A	465	22.765	9.367	77.113	1.00	29.92		C
ANISOU	535	C	THR	A	465	3866	3459	4043	1	-105	-77	C
ATOM	536	O	THR	A	465	22.110	9.745	76.147	1.00	28.27		O
ANISOU	536	O	THR	A	465	3875	2943	3923	-227	-180	-218	O
ATOM	537	CB	THR	A	465	23.179	11.425	78.396	1.00	28.00		C
ANISOU	537	CB	THR	A	465	3390	3411	3838	-29	-62	-15	C
ATOM	538	OG1	THR	A	465	24.185	12.412	78.730	1.00	28.05		O
ANISOU	538	OG1	THR	A	465	3745	3194	3718	-291	24	27	O
ATOM	539	CG2	THR	A	465	22.504	11.050	79.691	1.00	28.13		C
ANISOU	539	CG2	THR	A	465	3513	3375	3800	-22	-136	134	C
ATOM	540	N	PRO	A	466	22.593	8.217	77.761	1.00	31.12		N
ANISOU	540	N	PRO	A	466	3965	3610	4251	-64	-32	-2	N
ATOM	541	CA	PRO	A	466	21.580	7.290	77.300	1.00	30.49		C
ANISOU	541	CA	PRO	A	466	3953	3494	4138	-32	38	-10	C
ATOM	542	C	PRO	A	466	20.174	7.752	77.602	1.00	29.72		C
ANISOU	542	C	PRO	A	466	3899	3308	4087	-52	-17	59	C
ATOM	543	O	PRO	A	466	19.820	8.418	78.614	1.00	27.92		O
ANISOU	543	O	PRO	A	466	3477	3036	4094	-178	-59	102	O
ATOM	544	CB	PRO	A	466	21.950	5.982	77.999	1.00	31.51		C
ANISOU	544	CB	PRO	A	466	4144	3575	4254	79	-73	22	C
ATOM	545	CG	PRO	A	466	22.814	6.336	79.149	1.00	31.98		C
ANISOU	545	CG	PRO	A	466	4032	3787	4330	45	-85	92	C
ATOM	546	CD	PRO	A	466	23.338	7.725	78.931	1.00	31.87		C
ANISOU	546	CD	PRO	A	466	4120	3768	4222	34	14	20	C
ATOM	547	N	ASN	A	467	19.317	7.312	76.673	1.00	30.01		N
ANISOU	547	N	ASN	A	467	4027	3329	4047	175	-47	-98	N
ATOM	548	CA	ASN	A	467	17.882	7.496	76.691	1.00	29.27		C
ANISOU	548	CA	ASN	A	467	3912	3172	4037	63	61	-143	C
ATOM	549	C	ASN	A	467	17.543	8.988	76.884	1.00	26.77		C
ANISOU	549	C	ASN	A	467	3503	3002	3667	35	184	47	C
ATOM	550	O	ASN	A	467	16.652	9.284	77.688	1.00	25.43		O
ANISOU	550	O	ASN	A	467	3435	2380	3849	-118	236	54	O
ATOM	551	CB	ASN	A	467	17.272	6.706	77.864	1.00	31.93		C
ANISOU	551	CB	ASN	A	467	4314	3582	4235	-106	8	34	C
ATOM	552	CG	ASN	A	467	17.717	5.236	77.845	1.00	34.30		C
ANISOU	552	CG	ASN	A	467	4708	3733	4592	-15	40	8	C
ATOM	553	OD1	ASN	A	467	17.676	4.624	76.784	1.00	35.12		O
ANISOU	553	OD1	ASN	A	467	4909	3598	4837	-226	62	-111	O
ATOM	554	ND2	ASN	A	467	18.208	4.733	78.956	1.00	34.98		N
ANISOU	554	ND2	ASN	A	467	4788	3804	4698	47	28	63	N

ATOM	555	N	THR	A	468	18.283	9.880	76.240	1.00	23.46		N
ANISOU	555	N	THR	A	468	3151	2335	3429	284	-80	-151	N
ATOM	556	CA	THR	A	468	18.032	11.308	76.475	1.00	22.54		C
ANISOU	556	CA	THR	A	468	3109	2271	3182	51	-126	-79	C
ATOM	557	C	THR	A	468	17.834	12.048	75.175	1.00	22.67		C
ANISOU	557	C	THR	A	468	3012	2460	3143	121	26	-73	C
ATOM	558	O	THR	A	468	18.567	11.809	74.234	1.00	24.15		O
ANISOU	558	O	THR	A	468	3331	2680	3165	288	119	-17	O
ATOM	559	CB	THR	A	468	19.280	11.897	77.200	1.00	24.18		C
ANISOU	559	CB	THR	A	468	3173	2615	3398	5	-171	-105	C
ATOM	560	OG1	THR	A	468	19.321	11.404	78.527	1.00	24.77		O
ANISOU	560	OG1	THR	A	468	3365	2594	3454	-136	-157	-76	O
ATOM	561	CG2	THR	A	468	19.156	13.431	77.335	1.00	25.20		C
ANISOU	561	CG2	THR	A	468	3570	2608	3397	38	-89	-131	C
ATOM	562	N	VAL	A	469	16.862	12.978	75.145	1.00	20.11		N
ANISOU	562	N	VAL	A	469	2757	2167	2717	63	-160	1	N
ATOM	563	CA	VAL	A	469	16.715	13.872	74.015	1.00	19.77		C
ANISOU	563	CA	VAL	A	469	2753	2152	2605	20	-89	-120	C
ATOM	564	C	VAL	A	469	16.977	15.273	74.579	1.00	18.75		C
ANISOU	564	C	VAL	A	469	2545	2095	2485	-110	-69	-42	C
ATOM	565	O	VAL	A	469	16.511	15.555	75.702	1.00	19.29		O
ANISOU	565	O	VAL	A	469	2525	2117	2687	-104	148	-1	O
ATOM	566	CB	VAL	A	469	15.315	13.826	73.386	1.00	18.35		C
ANISOU	566	CB	VAL	A	469	2601	1953	2417	-51	-76	11	C
ATOM	567	CG1	VAL	A	469	14.952	15.012	72.498	1.00	18.07		C
ANISOU	567	CG1	VAL	A	469	2532	2076	2257	33	36	40	C
ATOM	568	CG2	VAL	A	469	15.243	12.507	72.570	1.00	20.95		C
ANISOU	568	CG2	VAL	A	469	3064	2204	2694	-68	20	-216	C
ATOM	569	N	ALA	A	470	17.707	16.045	73.809	1.00	17.32		N
ANISOU	569	N	ALA	A	470	2214	1828	2540	56	5	-187	N
ATOM	570	CA	ALA	A	470	17.914	17.453	74.210	1.00	17.85		C
ANISOU	570	CA	ALA	A	470	2268	1788	2725	-72	-6	-104	C
ATOM	571	C	ALA	A	470	17.602	18.261	72.963	1.00	17.99		C
ANISOU	571	C	ALA	A	470	2199	2066	2569	-9	-7	-162	C
ATOM	572	O	ALA	A	470	18.336	18.213	71.970	1.00	20.67		O
ANISOU	572	O	ALA	A	470	2565	2411	2878	174	78	105	O
ATOM	573	CB	ALA	A	470	19.318	17.689	74.748	1.00	19.31		C
ANISOU	573	CB	ALA	A	470	2174	2315	2847	9	93	-235	C
ATOM	574	N	PHE	A	471	16.437	18.953	72.987	1.00	17.19		N
ANISOU	574	N	PHE	A	471	2401	1730	2401	-122	90	57	N
ATOM	575	CA	PHE	A	471	16.057	19.708	71.814	1.00	18.27		C
ANISOU	575	CA	PHE	A	471	2217	2211	2515	39	-58	42	C
ATOM	576	C	PHE	A	471	16.863	21.017	71.716	1.00	17.18		C
ANISOU	576	C	PHE	A	471	2178	2138	2210	54	-64	60	C
ATOM	577	O	PHE	A	471	17.316	21.515	72.758	1.00	18.28		O
ANISOU	577	O	PHE	A	471	2178	2274	2492	28	-21	-128	O
ATOM	578	CB	PHE	A	471	14.559	20.000	71.881	1.00	19.21		C
ANISOU	578	CB	PHE	A	471	2311	2380	2608	106	-23	-80	C
ATOM	579	CG	PHE	A	471	13.641	18.855	71.543	1.00	20.35		C
ANISOU	579	CG	PHE	A	471	2629	2280	2821	61	-11	-59	C
ATOM	580	CD1	PHE	A	471	12.771	18.333	72.479	1.00	21.16		C
ANISOU	580	CD1	PHE	A	471	2677	2448	2917	-146	3	-85	C
ATOM	581	CD2	PHE	A	471	13.685	18.342	70.245	1.00	20.43		C
ANISOU	581	CD2	PHE	A	471	2617	2396	2750	-57	-183	-47	C
ATOM	582	CE1	PHE	A	471	11.907	17.276	72.146	1.00	21.30		C
ANISOU	582	CE1	PHE	A	471	2707	2495	2891	-177	-28	-22	C
ATOM	583	CE2	PHE	A	471	12.813	17.296	69.904	1.00	21.06		C
ANISOU	583	CE2	PHE	A	471	2543	2614	2844	-163	-185	56	C
ATOM	584	CZ	PHE	A	471	11.963	16.779	70.860	1.00	22.63		C
ANISOU	584	CZ	PHE	A	471	2965	2743	2890	-119	-27	41	C
ATOM	585	N	ASN	A	472	16.923	21.556	70.513	1.00	16.38		N
ANISOU	585	N	ASN	A	472	2110	1982	2133	150	90	-18	N
ATOM	586	CA	ASN	A	472	17.469	22.913	70.358	1.00	17.74		C
ANISOU	586	CA	ASN	A	472	2332	2070	2338	98	45	-29	C

ATOM	587	C	ASN	A	472	16.404	23.867	70.967	1.00	17.09		C
ANISOU	587	C	ASN	A	472	2307	2054	2132	30	23	50	C
ATOM	588	O	ASN	A	472	15.276	23.490	71.257	1.00	17.50		O
ANISOU	588	O	ASN	A	472	2375	2234	2042	46	-56	-173	O
ATOM	589	CB	ASN	A	472	17.796	23.224	68.913	1.00	19.19		C
ANISOU	589	CB	ASN	A	472	2484	2441	2365	-38	-53	73	C
ATOM	590	CG	ASN	A	472	16.619	23.180	67.945	1.00	20.81		C
ANISOU	590	CG	ASN	A	472	2619	2728	2560	19	-130	-20	C
ATOM	591	OD1	ASN	A	472	15.566	23.752	68.237	1.00	18.12		O
ANISOU	591	OD1	ASN	A	472	2304	2445	2136	-94	-235	-89	O
ATOM	592	ND2	ASN	A	472	16.854	22.512	66.807	1.00	21.41		N
ANISOU	592	ND2	ASN	A	472	2935	2648	2554	-74	-82	-8	N
ATOM	593	N	SER	A	473	16.766	25.165	71.034	1.00	16.78		N
ANISOU	593	N	SER	A	473	2316	1952	2107	176	-76	-71	N
ATOM	594	CA	SER	A	473	15.871	26.120	71.671	1.00	16.59		C
ANISOU	594	CA	SER	A	473	2355	1909	2039	107	-19	-67	C
ATOM	595	C	SER	A	473	14.662	26.506	70.821	1.00	17.79		C
ANISOU	595	C	SER	A	473	2307	2177	2274	78	-38	65	C
ATOM	596	O	SER	A	473	13.748	27.143	71.392	1.00	19.45		O
ANISOU	596	O	SER	A	473	2484	2502	2403	232	-97	93	O
ATOM	597	CB	SER	A	473	16.643	27.408	72.032	1.00	17.18		C
ANISOU	597	CB	SER	A	473	2580	1755	2191	57	-16	40	C
ATOM	598	OG	SER	A	473	17.266	27.936	70.895	1.00	19.85		O
ANISOU	598	OG	SER	A	473	2623	2238	2683	40	392	-114	O
ATOM	599	N	PHE	A	474	14.636	26.157	69.546	1.00	17.53		N
ANISOU	599	N	PHE	A	474	2285	2065	2311	-36	-203	6	N
ATOM	600	CA	PHE	A	474	13.496	26.490	68.688	1.00	18.89		C
ANISOU	600	CA	PHE	A	474	2420	2359	2398	120	-76	130	C
ATOM	601	C	PHE	A	474	12.321	25.582	69.025	1.00	18.64		C
ANISOU	601	C	PHE	A	474	2454	2318	2310	58	-97	35	C
ATOM	602	O	PHE	A	474	11.178	25.908	68.718	1.00	18.85		O
ANISOU	602	O	PHE	A	474	2487	2253	2422	86	-73	114	O
ATOM	603	CB	PHE	A	474	13.879	26.444	67.187	1.00	19.19		C
ANISOU	603	CB	PHE	A	474	2443	2478	2371	-35	12	17	C
ATOM	604	CG	PHE	A	474	14.952	27.483	66.871	1.00	19.51		C
ANISOU	604	CG	PHE	A	474	2439	2540	2434	19	-11	68	C
ATOM	605	CD1	PHE	A	474	16.249	27.055	66.629	1.00	19.12		C
ANISOU	605	CD1	PHE	A	474	2375	2879	2009	-82	-17	110	C
ATOM	606	CD2	PHE	A	474	14.648	28.842	66.851	1.00	19.28		C
ANISOU	606	CD2	PHE	A	474	2511	2535	2281	-78	-37	91	C
ATOM	607	CE1	PHE	A	474	17.266	27.963	66.372	1.00	20.03		C
ANISOU	607	CE1	PHE	A	474	2701	2756	2152	-110	-118	93	C
ATOM	608	CE2	PHE	A	474	15.666	29.780	66.589	1.00	19.86		C
ANISOU	608	CE2	PHE	A	474	2670	2568	2307	-146	53	-58	C
ATOM	609	CZ	PHE	A	474	16.950	29.308	66.353	1.00	20.70		C
ANISOU	609	CZ	PHE	A	474	2784	2814	2266	-33	-8	-45	C
ATOM	610	N	PHE	A	475	12.562	24.442	69.714	1.00	16.55		N
ANISOU	610	N	PHE	A	475	2100	2232	1957	-126	-153	28	N
ATOM	611	CA	PHE	A	475	11.468	23.564	70.146	1.00	18.34		C
ANISOU	611	CA	PHE	A	475	2388	2210	2369	-45	55	46	C
ATOM	612	C	PHE	A	475	10.565	24.335	71.115	1.00	17.97		C
ANISOU	612	C	PHE	A	475	2187	2295	2344	30	35	121	C
ATOM	613	O	PHE	A	475	9.345	24.419	70.846	1.00	19.98		O
ANISOU	613	O	PHE	A	475	2286	2329	2977	94	121	39	O
ATOM	614	CB	PHE	A	475	12.079	22.331	70.829	1.00	18.66		C
ANISOU	614	CB	PHE	A	475	2354	2382	2355	-28	14	191	C
ATOM	615	CG	PHE	A	475	11.044	21.462	71.505	1.00	18.46		C
ANISOU	615	CG	PHE	A	475	2325	2246	2444	-47	44	54	C
ATOM	616	CD1	PHE	A	475	10.398	20.479	70.778	1.00	18.82		C
ANISOU	616	CD1	PHE	A	475	2371	2366	2413	-73	-75	83	C
ATOM	617	CD2	PHE	A	475	10.743	21.630	72.848	1.00	17.98		C
ANISOU	617	CD2	PHE	A	475	2236	2305	2292	-1	-148	64	C
ATOM	618	CE1	PHE	A	475	9.431	19.690	71.409	1.00	19.74		C
ANISOU	618	CE1	PHE	A	475	2476	2360	2663	-130	59	97	C

ATOM	619	CE2	PHE	A	475	9.788	20.846	73.497	1.00	18.76		C
ANISOU	619	CE2	PHE	A	475	2431	2273	2422	-103	-178	8	C
ATOM	620	CZ	PHE	A	475	9.122	19.856	72.746	1.00	19.61		C
ANISOU	620	CZ	PHE	A	475	2451	2401	2600	-157	-176	-102	C
ATOM	621	N	TYR	A	476	11.138	24.930	72.150	1.00	17.77		N
ANISOU	621	N	TYR	A	476	2102	2192	2457	104	134	-19	N
ATOM	622	CA	TYR	A	476	10.241	25.668	73.065	1.00	18.09		C
ANISOU	622	CA	TYR	A	476	2260	2271	2341	66	-16	-168	C
ATOM	623	C	TYR	A	476	9.597	26.854	72.351	1.00	19.49		C
ANISOU	623	C	TYR	A	476	2159	2473	2775	29	-52	-8	C
ATOM	624	O	TYR	A	476	8.405	27.135	72.620	1.00	19.77		O
ANISOU	624	O	TYR	A	476	2355	2259	2899	66	-113	-111	O
ATOM	625	CB	TYR	A	476	10.971	26.011	74.409	1.00	18.95		C
ANISOU	625	CB	TYR	A	476	2243	2519	2438	-63	-169	-63	C
ATOM	626	CG	TYR	A	476	9.879	26.577	75.298	1.00	19.83		C
ANISOU	626	CG	TYR	A	476	2111	2665	2760	40	-156	-62	C
ATOM	627	CD1	TYR	A	476	8.936	25.709	75.867	1.00	22.22		C
ANISOU	627	CD1	TYR	A	476	2516	2642	3285	70	98	119	C
ATOM	628	CD2	TYR	A	476	9.698	27.938	75.396	1.00	20.04		C
ANISOU	628	CD2	TYR	A	476	2213	2657	2745	11	7	-159	C
ATOM	629	CE1	TYR	A	476	7.866	26.193	76.602	1.00	24.48		C
ANISOU	629	CE1	TYR	A	476	2860	3006	3436	-1	235	-49	C
ATOM	630	CE2	TYR	A	476	8.589	28.431	76.118	1.00	21.46		C
ANISOU	630	CE2	TYR	A	476	2086	2907	3159	164	94	-102	C
ATOM	631	CZ	TYR	A	476	7.725	27.548	76.737	1.00	23.80		C
ANISOU	631	CZ	TYR	A	476	2729	2939	3374	175	209	20	C
ATOM	632	OH	TYR	A	476	6.631	28.072	77.419	1.00	25.08		O
ANISOU	632	OH	TYR	A	476	2350	3420	3759	44	203	-33	O
ATOM	633	N	THR	A	477	10.309	27.560	71.485	1.00	21.50		N
ANISOU	633	N	THR	A	477	2740	2648	2781	116	-148	243	N
ATOM	634	CA	THR	A	477	9.673	28.679	70.757	1.00	21.75		C
ANISOU	634	CA	THR	A	477	2708	2534	3024	90	-163	172	C
ATOM	635	C	THR	A	477	8.402	28.201	70.043	1.00	21.93		C
ANISOU	635	C	THR	A	477	2741	2723	2869	-53	-41	4	C
ATOM	636	O	THR	A	477	7.329	28.815	70.137	1.00	23.65		O
ANISOU	636	O	THR	A	477	2810	2873	3303	-22	-11	57	O
ATOM	637	CB	THR	A	477	10.626	29.228	69.682	1.00	23.32		C
ANISOU	637	CB	THR	A	477	2839	2850	3170	37	-57	123	C
ATOM	638	OG1	THR	A	477	11.813	29.668	70.370	1.00	23.83		O
ANISOU	638	OG1	THR	A	477	2822	2740	3491	87	-217	280	O
ATOM	639	CG2	THR	A	477	9.959	30.425	69.016	1.00	22.98		C
ANISOU	639	CG2	THR	A	477	2878	2790	3064	-105	-140	161	C
ATOM	640	N	ASN	A	478	8.506	27.135	69.257	1.00	19.70		N
ANISOU	640	N	ASN	A	478	2369	2595	2522	63	70	184	N
ATOM	641	CA	ASN	A	478	7.359	26.589	68.548	1.00	21.28		C
ANISOU	641	CA	ASN	A	478	2546	2738	2802	-99	60	52	C
ATOM	642	C	ASN	A	478	6.265	26.103	69.506	1.00	21.57		C
ANISOU	642	C	ASN	A	478	2603	2859	2735	21	54	203	C
ATOM	643	O	ASN	A	478	5.069	26.322	69.220	1.00	22.41		O
ANISOU	643	O	ASN	A	478	2725	2775	3016	70	-23	82	O
ATOM	644	CB	ASN	A	478	7.751	25.461	67.584	1.00	21.76		C
ANISOU	644	CB	ASN	A	478	2654	2883	2733	19	3	49	C
ATOM	645	CG	ASN	A	478	8.386	25.923	66.288	1.00	22.65		C
ANISOU	645	CG	ASN	A	478	2684	3068	2853	11	3	66	C
ATOM	646	OD1	ASN	A	478	8.519	27.114	65.995	1.00	24.82		O
ANISOU	646	OD1	ASN	A	478	3036	3296	3099	-33	62	249	O
ATOM	647	ND2	ASN	A	478	8.783	24.946	65.498	1.00	23.76		N
ANISOU	647	ND2	ASN	A	478	2919	3399	2710	60	59	30	N
ATOM	648	N	LEU	A	479	6.619	25.353	70.543	1.00	20.09		N
ANISOU	648	N	LEU	A	479	2466	2627	2539	-44	36	78	N
ATOM	649	CA	LEU	A	479	5.615	24.824	71.459	1.00	20.20		C
ANISOU	649	CA	LEU	A	479	2473	2750	2451	72	-4	139	C
ATOM	650	C	LEU	A	479	4.813	25.922	72.142	1.00	21.07		C
ANISOU	650	C	LEU	A	479	2598	2650	2758	-20	96	119	C

2025-04-23 10:00

ATOM	651	O	LEU	A	479	3.589	25.832	72.255	1.00	21.87		O
ANISOU	651	O	LEU	A	479	2428	2969	2910	129	-127	72	O
ATOM	652	CB	LEU	A	479	6.325	23.969	72.539	1.00	19.68		C
ANISOU	652	CB	LEU	A	479	2477	2585	2416	106	133	195	C
ATOM	653	CG	LEU	A	479	5.387	23.460	73.656	1.00	20.12		C
ANISOU	653	CG	LEU	A	479	2334	2667	2645	-205	-7	183	C
ATOM	654	CD1	LEU	A	479	4.357	22.478	73.093	1.00	21.56		C
ANISOU	654	CD1	LEU	A	479	2457	2926	2810	-162	-217	14	C
ATOM	655	CD2	LEU	A	479	6.287	22.769	74.684	1.00	20.67		C
ANISOU	655	CD2	LEU	A	479	2472	2719	2662	-62	46	250	C
ATOM	656	N	SER	A	480	5.513	26.983	72.522	1.00	20.65		N
ANISOU	656	N	SER	A	480	2463	2809	2576	-4	-126	19	N
ATOM	657	CA	SER	A	480	4.873	28.104	73.219	1.00	22.40		C
ANISOU	657	CA	SER	A	480	2802	2749	2961	35	56	34	C
ATOM	658	C	SER	A	480	4.069	28.969	72.258	1.00	23.42		C
ANISOU	658	C	SER	A	480	2807	3087	3004	0	-17	116	C
ATOM	659	O	SER	A	480	2.939	29.355	72.617	1.00	25.81		O
ANISOU	659	O	SER	A	480	3132	3547	3126	279	16	234	O
ATOM	660	CB	SER	A	480	5.912	28.907	74.021	1.00	23.15		C
ANISOU	660	CB	SER	A	480	2992	2555	3251	111	26	-99	C
ATOM	661	OG	SER	A	480	6.868	29.472	73.141	1.00	24.84		O
ANISOU	661	OG	SER	A	480	3105	3002	3330	75	112	-142	O
ATOM	662	N	GLU	A	481	4.617	29.234	71.070	1.00	23.26		N
ANISOU	662	N	GLU	A	481	2875	3087	2874	-89	-131	185	N
ATOM	663	CA	GLU	A	481	3.881	30.114	70.154	1.00	24.74		C
ANISOU	663	CA	GLU	A	481	2990	3246	3165	96	-95	152	C
ATOM	664	C	GLU	A	481	2.822	29.390	69.349	1.00	23.37		C
ANISOU	664	C	GLU	A	481	2884	3117	2880	101	95	142	C
ATOM	665	O	GLU	A	481	1.770	29.998	69.066	1.00	24.54		O
ANISOU	665	O	GLU	A	481	2813	3507	3006	192	34	342	O
ATOM	666	CB	GLU	A	481	4.922	30.825	69.221	1.00	26.78		C
ANISOU	666	CB	GLU	A	481	3320	3527	3330	177	138	185	C
ATOM	667	CG	GLU	A	481	5.826	31.730	70.060	1.00	31.33		C
ANISOU	667	CG	GLU	A	481	3841	4016	4048	18	-36	-121	C
ATOM	668	CD	GLU	A	481	6.870	32.524	69.310	1.00	35.02		C
ANISOU	668	CD	GLU	A	481	4406	4453	4447	-52	162	85	C
ATOM	669	OE1	GLU	A	481	6.924	32.439	68.073	1.00	36.89		O
ANISOU	669	OE1	GLU	A	481	4700	4849	4465	-56	100	104	O
ATOM	670	OE2	GLU	A	481	7.689	33.257	69.925	1.00	36.88		O
ANISOU	670	OE2	GLU	A	481	4515	4544	4954	-156	167	25	O
ATOM	671	N	ARG	A	482	3.015	28.135	68.992	1.00	21.49		N
ANISOU	671	N	ARG	A	482	2570	3050	2543	209	162	258	N
ATOM	672	CA	ARG	A	482	2.188	27.393	68.067	1.00	22.47		C
ANISOU	672	CA	ARG	A	482	2691	3057	2789	155	134	176	C
ATOM	673	C	ARG	A	482	1.696	26.055	68.572	1.00	21.74		C
ANISOU	673	C	ARG	A	482	2602	2996	2663	193	83	57	C
ATOM	674	O	ARG	A	482	1.110	25.246	67.875	1.00	21.16		O
ANISOU	674	O	ARG	A	482	2603	3095	2343	-3	172	241	O
ATOM	675	CB	ARG	A	482	2.993	27.229	66.743	1.00	25.91		C
ANISOU	675	CB	ARG	A	482	3226	3567	3053	236	324	86	C
ATOM	676	CG	ARG	A	482	3.148	28.523	65.918	1.00	27.55		C
ANISOU	676	CG	ARG	A	482	3465	3622	3380	184	272	167	C
ATOM	677	CD	ARG	A	482	4.168	28.296	64.764	1.00	29.36		C
ANISOU	677	CD	ARG	A	482	3759	4020	3377	128	295	117	C
ATOM	678	NE	ARG	A	482	5.495	28.540	65.280	1.00	30.60		N
ANISOU	678	NE	ARG	A	482	3833	4101	3692	2	249	69	N
ATOM	679	CZ	ARG	A	482	6.105	29.624	65.694	1.00	30.26		C
ANISOU	679	CZ	ARG	A	482	3752	3949	3798	15	210	164	C
ATOM	680	NH1	ARG	A	482	5.499	30.809	65.603	1.00	30.80		N
ANISOU	680	NH1	ARG	A	482	3762	4052	3889	113	218	183	N
ATOM	681	NH2	ARG	A	482	7.344	29.589	66.196	1.00	29.80		N
ANISOU	681	NH2	ARG	A	482	3809	3799	3716	66	177	226	N
ATOM	682	N	GLY	A	483	1.720	25.912	69.906	1.00	20.37		N
ANISOU	682	N	GLY	A	483	2485	2747	2506	107	142	120	N

ATOM	715	CB	VAL	A	487	7.036	20.741	68.858	1.00	21.86		C
ANISOU	715	CB	VAL	A	487	2751	2635	2919	-125	54	-17	C
ATOM	716	CG1	VAL	A	487	7.717	22.130	68.930	1.00	21.21		C
ANISOU	716	CG1	VAL	A	487	2762	2548	2751	-185	-30	6	C
ATOM	717	CG2	VAL	A	487	6.036	20.636	70.021	1.00	22.10		C
ANISOU	717	CG2	VAL	A	487	2802	2822	2772	-83	-18	-18	C
ATOM	718	N	ARG	A	488	4.759	18.820	66.855	1.00	27.74		N
ANISOU	718	N	ARG	A	488	3337	3501	3703	-78	-270	9	N
ATOM	719	CA	ARG	A	488	4.289	17.434	66.723	1.00	29.32		C
ANISOU	719	CA	ARG	A	488	3688	3536	3918	-122	-114	-55	C
ATOM	720	C	ARG	A	488	5.226	16.489	66.009	1.00	28.52		C
ANISOU	720	C	ARG	A	488	3495	3571	3769	-161	-204	-53	C
ATOM	721	O	ARG	A	488	5.365	15.329	66.459	1.00	28.02		O
ANISOU	721	O	ARG	A	488	3378	3467	3799	87	-222	-186	O
ATOM	722	CB	ARG	A	488	2.904	17.505	66.023	1.00	33.15		C
ANISOU	722	CB	ARG	A	488	3626	4398	4572	34	-98	41	C
ATOM	723	CG	ARG	A	488	2.537	16.271	65.232	1.00	38.52		C
ANISOU	723	CG	ARG	A	488	4835	4736	5064	-70	-20	-232	C
ATOM	724	CD	ARG	A	488	1.369	16.524	64.248	1.00	42.82		C
ANISOU	724	CD	ARG	A	488	5215	5562	5493	-33	-239	46	C
ATOM	725	NE	ARG	A	488	1.696	15.754	63.020	1.00	46.19		N
ANISOU	725	NE	ARG	A	488	5810	5958	5783	-63	-54	-152	N
ATOM	726	CZ	ARG	A	488	1.607	16.346	61.822	1.00	48.42		C
ANISOU	726	CZ	ARG	A	488	6177	6192	6027	-17	-51	53	C
ATOM	727	NH1	ARG	A	488	1.219	17.616	61.769	1.00	49.70		N
ANISOU	727	NH1	ARG	A	488	6368	6221	6292	42	-8	-18	N
ATOM	728	NH2	ARG	A	488	1.897	15.709	60.691	1.00	49.12		N
ANISOU	728	NH2	ARG	A	488	6200	6283	6181	-22	23	-48	N
ATOM	729	N	ARG	A	489	5.914	16.910	64.963	1.00	28.24		N
ANISOU	729	N	ARG	A	489	3384	3686	3658	-54	-286	-113	N
ATOM	730	CA	ARG	A	489	6.774	16.105	64.133	1.00	29.05		C
ANISOU	730	CA	ARG	A	489	3379	3834	3825	-80	-211	-176	C
ATOM	731	C	ARG	A	489	8.214	16.032	64.629	1.00	27.47		C
ANISOU	731	C	ARG	A	489	3253	3651	3533	-48	-94	-205	C
ATOM	732	O	ARG	A	489	9.039	15.317	64.060	1.00	26.40		O
ANISOU	732	O	ARG	A	489	3222	3615	3195	-264	-251	-483	O
ATOM	733	CB	ARG	A	489	6.757	16.707	62.710	1.00	32.28		C
ANISOU	733	CB	ARG	A	489	3978	4263	4024	-23	-37	-26	C
ATOM	734	CG	ARG	A	489	5.345	16.801	62.100	1.00	35.16		C
ANISOU	734	CG	ARG	A	489	4131	4656	4571	-37	-176	-93	C
ATOM	735	CD	ARG	A	489	5.336	17.713	60.867	1.00	37.60		C
ANISOU	735	CD	ARG	A	489	4691	4844	4753	-36	-179	34	C
ATOM	736	NE	ARG	A	489	6.298	17.234	59.890	1.00	40.46		N
ANISOU	736	NE	ARG	A	489	4958	5352	5064	-42	29	-13	N
ATOM	737	CZ	ARG	A	489	6.094	16.403	58.876	1.00	42.42		C
ANISOU	737	CZ	ARG	A	489	5348	5480	5290	-54	9	-115	C
ATOM	738	NH1	ARG	A	489	7.131	16.072	58.109	1.00	42.34		N
ANISOU	738	NH1	ARG	A	489	5279	5487	5322	-10	-25	-62	N
ATOM	739	NH2	ARG	A	489	4.867	15.935	58.613	1.00	43.18		N
ANISOU	739	NH2	ARG	A	489	5386	5600	5421	-90	-54	-56	N
ATOM	740	N	TRP	A	490	8.549	16.775	65.688	1.00	25.78		N
ANISOU	740	N	TRP	A	490	3103	3277	3416	-21	-30	-145	N
ATOM	741	CA	TRP	A	490	9.951	16.828	66.092	1.00	25.12		C
ANISOU	741	CA	TRP	A	490	3190	3150	3204	-55	-147	-154	C
ATOM	742	C	TRP	A	490	10.515	15.572	66.725	1.00	24.49		C
ANISOU	742	C	TRP	A	490	3117	3106	3082	-108	-119	-127	C
ATOM	743	O	TRP	A	490	11.668	15.235	66.431	1.00	24.90		O
ANISOU	743	O	TRP	A	490	3297	3120	3043	-36	-143	-88	O
ATOM	744	CB	TRP	A	490	10.197	18.013	67.029	1.00	24.61		C
ANISOU	744	CB	TRP	A	490	3235	2872	3245	-49	-42	-95	C
ATOM	745	CG	TRP	A	490	10.090	19.363	66.378	1.00	24.58		C
ANISOU	745	CG	TRP	A	490	3171	3084	3084	-60	17	67	C
ATOM	746	CD1	TRP	A	490	9.189	19.829	65.478	1.00	24.10		C
ANISOU	746	CD1	TRP	A	490	3049	2996	3112	-60	-5	-20	C

ATOM	747	CD2	TRP	A	490	11.014	20.449	66.620	1.00	24.01		C
ANISOU	747	CD2	TRP	A	490	3192	2974	2958	-19	29	-80	C
ATOM	748	NE1	TRP	A	490	9.472	21.148	65.149	1.00	24.22		N
ANISOU	748	NE1	TRP	A	490	3183	3055	2964	-19	-54	88	N
ATOM	749	CE2	TRP	A	490	10.580	21.538	65.830	1.00	24.33		C
ANISOU	749	CE2	TRP	A	490	3162	2954	3128	-115	3	-36	C
ATOM	750	CE3	TRP	A	490	12.144	20.591	67.427	1.00	24.49		C
ANISOU	750	CE3	TRP	A	490	3075	3166	3065	-59	49	-46	C
ATOM	751	CZ2	TRP	A	490	11.238	22.778	65.836	1.00	24.13		C
ANISOU	751	CZ2	TRP	A	490	3104	2920	3145	-74	100	37	C
ATOM	752	CZ3	TRP	A	490	12.825	21.798	67.400	1.00	23.93		C
ANISOU	752	CZ3	TRP	A	490	3094	3066	2932	-35	205	-9	C
ATOM	753	CH2	TRP	A	490	12.358	22.856	66.605	1.00	23.70		C
ANISOU	753	CH2	TRP	A	490	3042	3054	2909	-55	103	-64	C
ATOM	754	N	MET	A	491	9.793	14.860	67.597	1.00	24.48		N
ANISOU	754	N	MET	A	491	3155	3047	3097	-162	-201	-129	N
ATOM	755	CA	MET	A	491	10.357	13.667	68.207	1.00	26.74		C
ANISOU	755	CA	MET	A	491	3478	3228	3454	-18	-74	0	C
ATOM	756	C	MET	A	491	10.653	12.586	67.163	1.00	28.07		C
ANISOU	756	C	MET	A	491	3601	3305	3761	-50	33	-111	C
ATOM	757	O	MET	A	491	11.614	11.834	67.303	1.00	26.77		O
ANISOU	757	O	MET	A	491	3319	3037	3817	-348	-126	-255	O
ATOM	758	CB	MET	A	491	9.429	13.124	69.294	1.00	25.41		C
ANISOU	758	CB	MET	A	491	3275	3010	3368	-49	-100	-95	C
ATOM	759	CG	MET	A	491	10.043	11.980	70.104	1.00	25.95		C
ANISOU	759	CG	MET	A	491	3372	3092	3396	-27	-95	-27	C
ATOM	760	SD	MET	A	491	11.455	12.453	71.124	1.00	25.36		S
ANISOU	760	SD	MET	A	491	3258	2972	3407	59	-94	-107	S
ATOM	761	CE	MET	A	491	10.687	13.294	72.510	1.00	25.75		C
ANISOU	761	CE	MET	A	491	3197	3275	3312	-36	20	-9	C
ATOM	762	N	LYS	A	492	9.839	12.508	66.105	1.00	31.38		N
ANISOU	762	N	LYS	A	492	3946	3914	4063	-27	-175	-23	N
ATOM	763	CA	LYS	A	492	10.063	11.518	65.058	1.00	34.48		C
ANISOU	763	CA	LYS	A	492	4505	4240	4356	-8	16	-158	C
ATOM	764	C	LYS	A	492	11.440	11.700	64.441	1.00	34.42		C
ANISOU	764	C	LYS	A	492	4472	4279	4326	43	-13	-61	C
ATOM	765	O	LYS	A	492	12.174	10.747	64.191	1.00	33.93		O
ANISOU	765	O	LYS	A	492	4582	4097	4213	37	-71	-133	O
ATOM	766	CB	LYS	A	492	9.001	11.616	63.954	1.00	37.40		C
ANISOU	766	CB	LYS	A	492	4704	4841	4665	-25	-125	62	C
ATOM	767	CG	LYS	A	492	8.969	10.333	63.113	1.00	41.21		C
ANISOU	767	CG	LYS	A	492	5382	5069	5205	28	37	-138	C
ATOM	768	CD	LYS	A	492	7.731	10.344	62.218	1.00	44.18		C
ANISOU	768	CD	LYS	A	492	5511	5680	5594	19	-123	-13	C
ATOM	769	CE	LYS	A	492	7.872	9.308	61.102	1.00	46.40		C
ANISOU	769	CE	LYS	A	492	5949	5896	5786	9	-31	-123	C
ATOM	770	NZ	LYS	A	492	6.977	9.699	59.965	1.00	47.84		N
ANISOU	770	NZ	LYS	A	492	6110	6125	5940	59	-106	1	N
ATOM	771	N	ARG	A	493	11.844	12.964	64.234	1.00	33.46		N
ANISOU	771	N	ARG	A	493	4409	4157	4149	45	-35	-176	N
ATOM	772	CA	ARG	A	493	13.157	13.256	63.687	1.00	35.01		C
ANISOU	772	CA	ARG	A	493	4529	4437	4336	-78	11	-97	C
ATOM	773	C	ARG	A	493	14.297	12.989	64.649	1.00	33.12		C
ANISOU	773	C	ARG	A	493	4315	3993	4275	-59	94	-97	C
ATOM	774	O	ARG	A	493	15.469	13.097	64.253	1.00	34.76		O
ANISOU	774	O	ARG	A	493	4464	4369	4376	-111	183	-161	O
ATOM	775	CB	ARG	A	493	13.252	14.692	63.177	1.00	37.40		C
ANISOU	775	CB	ARG	A	493	4860	4461	4889	-10	91	-48	C
ATOM	776	CG	ARG	A	493	12.733	15.068	61.831	1.00	40.11		C
ANISOU	776	CG	ARG	A	493	5084	5101	5054	-4	-2	82	C
ATOM	777	CD	ARG	A	493	12.285	13.921	60.962	1.00	42.49		C
ANISOU	777	CD	ARG	A	493	5606	5219	5321	-78	48	-68	C
ATOM	778	NE	ARG	A	493	11.374	14.308	59.879	1.00	44.09		N
ANISOU	778	NE	ARG	A	493	5637	5487	5629	-60	-33	75	N

ATOM	811	CB	GLN	A	497	8.806	6.534	70.829	1.00	30.38		C
ANISOU	811	CB	GLN	A	497	3907	3450	4184	-306	-41	-80	C
ATOM	812	CG	GLN	A	497	8.741	6.009	69.409	1.00	32.97		C
ANISOU	812	CG	GLN	A	497	4319	3985	4221	-210	-97	-101	C
ATOM	813	CD	GLN	A	497	9.923	5.137	69.015	1.00	34.66		C
ANISOU	813	CD	GLN	A	497	4538	4150	4481	-138	-45	-207	C
ATOM	814	OE1	GLN	A	497	10.465	4.356	69.800	1.00	36.17		O
ANISOU	814	OE1	GLN	A	497	4886	4141	4715	-122	-163	-167	O
ATOM	815	NE2	GLN	A	497	10.403	5.326	67.792	1.00	35.09		N
ANISOU	815	NE2	GLN	A	497	4753	4051	4527	-252	47	-169	N
ATOM	816	N	ILE	A	498	8.856	8.999	72.909	1.00	26.96		N
ANISOU	816	N	ILE	A	498	3376	3230	3639	-207	42	54	N
ATOM	817	CA	ILE	A	498	8.834	9.464	74.294	1.00	26.10		C
ANISOU	817	CA	ILE	A	498	3234	3081	3604	-228	-32	-44	C
ATOM	818	C	ILE	A	498	8.820	8.344	75.308	1.00	27.19		C
ANISOU	818	C	ILE	A	498	3387	3154	3788	-110	-88	42	C
ATOM	819	O	ILE	A	498	9.458	8.459	76.367	1.00	26.26		O
ANISOU	819	O	ILE	A	498	3535	2680	3762	-163	-90	-80	O
ATOM	820	CB	ILE	A	498	7.747	10.513	74.568	1.00	25.77		C
ANISOU	820	CB	ILE	A	498	3081	3285	3425	-121	-70	123	C
ATOM	821	CG1	ILE	A	498	7.970	11.181	75.925	1.00	25.46		C
ANISOU	821	CG1	ILE	A	498	3048	3008	3616	-153	-24	-8	C
ATOM	822	CG2	ILE	A	498	6.327	9.955	74.522	1.00	25.92		C
ANISOU	822	CG2	ILE	A	498	3222	3123	3502	-280	105	59	C
ATOM	823	CD1	ILE	A	498	7.278	12.526	76.083	1.00	26.13		C
ANISOU	823	CD1	ILE	A	498	3187	3171	3572	0	-129	-26	C
ATOM	824	N	ASP	A	499	8.157	7.193	75.038	1.00	28.65		N
ANISOU	824	N	ASP	A	499	3590	3265	4028	-176	-190	-141	N
ATOM	825	CA	ASP	A	499	8.173	6.129	76.050	1.00	30.82		C
ANISOU	825	CA	ASP	A	499	3931	3711	4067	-163	-107	52	C
ATOM	826	C	ASP	A	499	9.494	5.403	76.222	1.00	31.39		C
ANISOU	826	C	ASP	A	499	3956	3756	4214	-187	-95	-34	C
ATOM	827	O	ASP	A	499	9.627	4.594	77.172	1.00	31.89		O
ANISOU	827	O	ASP	A	499	4017	3673	4427	-142	-110	87	O
ATOM	828	CB	ASP	A	499	7.030	5.141	75.773	1.00	33.24		C
ANISOU	828	CB	ASP	A	499	4243	3872	4514	-317	-109	78	C
ATOM	829	CG	ASP	A	499	7.192	4.219	74.608	1.00	36.15		C
ANISOU	829	CG	ASP	A	499	4655	4509	4572	-143	-61	-89	C
ATOM	830	OD1	ASP	A	499	8.219	4.099	73.946	1.00	37.41		O
ANISOU	830	OD1	ASP	A	499	4793	4680	4742	-284	-42	-127	O
ATOM	831	OD2	ASP	A	499	6.193	3.482	74.333	1.00	38.16		O
ANISOU	831	OD2	ASP	A	499	4859	4729	4912	-246	-114	-63	O
ATOM	832	N	LYS	A	500	10.520	5.686	75.422	1.00	30.89		N
ANISOU	832	N	LYS	A	500	3981	3614	4141	-98	-87	-98	N
ATOM	833	CA	LYS	A	500	11.827	5.064	75.640	1.00	30.61		C
ANISOU	833	CA	LYS	A	500	3892	3519	4220	-198	-178	-147	C
ATOM	834	C	LYS	A	500	12.819	5.982	76.349	1.00	28.91		C
ANISOU	834	C	LYS	A	500	3781	3245	3959	-28	-94	-128	C
ATOM	835	O	LYS	A	500	13.970	5.604	76.514	1.00	28.04		O
ANISOU	835	O	LYS	A	500	3667	2835	4153	-183	-240	-304	O
ATOM	836	CB	LYS	A	500	12.373	4.629	74.254	1.00	34.11		C
ANISOU	836	CB	LYS	A	500	4305	4243	4411	90	48	-77	C
ATOM	837	CG	LYS	A	500	11.456	3.400	73.943	1.00	37.41		C
ANISOU	837	CG	LYS	A	500	4684	4600	4931	-123	-80	-94	C
ATOM	838	CD	LYS	A	500	11.785	2.652	72.688	1.00	39.98		C
ANISOU	838	CD	LYS	A	500	5091	5063	5037	54	-10	-138	C
ATOM	839	CE	LYS	A	500	10.608	1.784	72.266	1.00	41.14		C
ANISOU	839	CE	LYS	A	500	5202	5084	5345	-48	-37	-35	C
ATOM	840	NZ	LYS	A	500	9.401	2.609	71.943	1.00	41.53		N
ANISOU	840	NZ	LYS	A	500	5193	5156	5430	-56	-130	-88	N
ATOM	841	N	LEU	A	501	12.366	7.190	76.683	1.00	27.35		N
ANISOU	841	N	LEU	A	501	3592	3084	3714	-198	-184	-169	N
ATOM	842	CA	LEU	A	501	13.338	8.128	77.273	1.00	24.06		C
ANISOU	842	CA	LEU	A	501	3309	2524	3307	12	-104	44	C

ATOM	843	C	LEU	A	501	13.340	8.270	78.776	1.00	24.65		C
ANISOU	843	C	LEU	A	501	3295	2748	3322	-48	-154	13	C
ATOM	844	O	LEU	A	501	12.382	8.095	79.530	1.00	24.51		O
ANISOU	844	O	LEU	A	501	3369	2662	3281	-328	-100	-137	O
ATOM	845	CB	LEU	A	501	12.991	9.507	76.626	1.00	22.80		C
ANISOU	845	CB	LEU	A	501	3188	2270	3207	-32	-74	-72	C
ATOM	846	CG	LEU	A	501	13.115	9.641	75.114	1.00	23.38		C
ANISOU	846	CG	LEU	A	501	3208	2415	3262	16	-170	-54	C
ATOM	847	CD1	LEU	A	501	12.638	11.028	74.620	1.00	23.49		C
ANISOU	847	CD1	LEU	A	501	3282	2413	3231	24	-189	-102	C
ATOM	848	CD2	LEU	A	501	14.542	9.352	74.648	1.00	25.32		C
ANISOU	848	CD2	LEU	A	501	3479	2848	3293	-21	121	-87	C
ATOM	849	N	ASP	A	502	14.522	8.677	79.293	1.00	23.43		N
ANISOU	849	N	ASP	A	502	3120	2349	3436	-144	-18	52	N
ATOM	850	CA	ASP	A	502	14.654	8.980	80.712	1.00	23.57		C
ANISOU	850	CA	ASP	A	502	3257	2325	3373	-127	100	39	C
ATOM	851	C	ASP	A	502	14.382	10.496	80.901	1.00	22.78		C
ANISOU	851	C	ASP	A	502	3137	2397	3122	63	51	35	C
ATOM	852	O	ASP	A	502	13.750	10.911	81.856	1.00	21.88		O
ANISOU	852	O	ASP	A	502	3058	2139	3117	-149	117	149	O
ATOM	853	CB	ASP	A	502	16.075	8.708	81.193	1.00	28.57		C
ANISOU	853	CB	ASP	A	502	3591	3354	3910	30	-109	48	C
ATOM	854	CG	ASP	A	502	16.387	7.220	81.350	1.00	32.24		C
ANISOU	854	CG	ASP	A	502	4240	3520	4489	122	5	10	C
ATOM	855	OD1	ASP	A	502	15.442	6.425	81.379	1.00	33.56		O
ANISOU	855	OD1	ASP	A	502	4614	3436	4700	-46	-5	86	O
ATOM	856	OD2	ASP	A	502	17.583	6.891	81.441	1.00	34.47		O
ANISOU	856	OD2	ASP	A	502	4372	3836	4889	111	-107	27	O
ATOM	857	N	LYS	A	503	15.003	11.306	80.043	1.00	21.76		N
ANISOU	857	N	LYS	A	503	2816	2231	3221	62	-61	75	N
ATOM	858	CA	LYS	A	503	14.861	12.766	80.175	1.00	20.78		C
ANISOU	858	CA	LYS	A	503	2871	2240	2786	-100	-77	-39	C
ATOM	859	C	LYS	A	503	14.722	13.436	78.822	1.00	19.90		C
ANISOU	859	C	LYS	A	503	2611	2113	2836	-163	51	4	C
ATOM	860	O	LYS	A	503	15.260	12.961	77.820	1.00	19.92		O
ANISOU	860	O	LYS	A	503	2563	2046	2959	-20	12	-67	O
ATOM	861	CB	LYS	A	503	16.095	13.375	80.863	1.00	21.99		C
ANISOU	861	CB	LYS	A	503	2829	2545	2980	-89	-107	42	C
ATOM	862	CG	LYS	A	503	16.353	12.959	82.295	1.00	23.57		C
ANISOU	862	CG	LYS	A	503	3179	2755	3020	-85	-174	118	C
ATOM	863	CD	LYS	A	503	17.372	13.907	82.936	1.00	25.83		C
ANISOU	863	CD	LYS	A	503	3183	3249	3383	-302	-178	36	C
ATOM	864	CE	LYS	A	503	17.693	13.448	84.353	1.00	27.13		C
ANISOU	864	CE	LYS	A	503	3477	3464	3368	-216	-19	80	C
ATOM	865	NZ	LYS	A	503	18.191	12.036	84.332	1.00	28.53		N
ANISOU	865	NZ	LYS	A	503	3575	3704	3560	-20	-24	19	N
ATOM	866	N	ILE	A	504	14.062	14.597	78.796	1.00	19.58		N
ANISOU	866	N	ILE	A	504	2452	2229	2759	-68	20	111	N
ATOM	867	CA	ILE	A	504	14.024	15.466	77.619	1.00	19.71		C
ANISOU	867	CA	ILE	A	504	2612	2159	2719	-139	-139	13	C
ATOM	868	C	ILE	A	504	14.460	16.861	78.108	1.00	19.00		C
ANISOU	868	C	ILE	A	504	2454	2130	2637	-222	126	-4	C
ATOM	869	O	ILE	A	504	13.856	17.312	79.096	1.00	18.32		O
ANISOU	869	O	ILE	A	504	2545	1805	2610	-267	180	13	O
ATOM	870	CB	ILE	A	504	12.625	15.642	77.006	1.00	19.18		C
ANISOU	870	CB	ILE	A	504	2403	2188	2698	-122	-104	3	C
ATOM	871	CG1	ILE	A	504	12.186	14.292	76.412	1.00	21.05		C
ANISOU	871	CG1	ILE	A	504	2649	2366	2982	-206	-150	-105	C
ATOM	872	CG2	ILE	A	504	12.704	16.623	75.823	1.00	20.43		C
ANISOU	872	CG2	ILE	A	504	2621	2359	2781	-105	-96	79	C
ATOM	873	CD1	ILE	A	504	10.689	14.246	76.137	1.00	21.81		C
ANISOU	873	CD1	ILE	A	504	2487	2600	3200	-45	35	-14	C
ATOM	874	N	PHE	A	505	15.478	17.432	77.489	1.00	16.76		N
ANISOU	874	N	PHE	A	505	2350	1723	2294	-112	50	121	N

ATOM	875	CA	PHE	A	505	15.939	18.778	77.885	1.00	15.92		
ANISOU	875	CA	PHE	A	505	1984	1899	2165	-26	-102	-79	
ATOM	876	C	PHE	A	505	15.418	19.798	76.892	1.00	17.51		
ANISOU	876	C	PHE	A	505	2517	1855	2282	-157	31	10	
ATOM	877	O	PHE	A	505	15.458	19.531	75.680	1.00	18.22		
ANISOU	877	O	PHE	A	505	2693	1810	2418	13	93	-40	
ATOM	878	CB	PHE	A	505	17.497	18.864	77.935	1.00	15.84		
ANISOU	878	CB	PHE	A	505	2001	1798	2218	-97	50	95	
ATOM	879	CG	PHE	A	505	18.027	18.114	79.135	1.00	17.42		
ANISOU	879	CG	PHE	A	505	2451	1851	2318	-81	-10	52	
ATOM	880	CD1	PHE	A	505	18.435	16.796	78.952	1.00	18.07		
ANISOU	880	CD1	PHE	A	505	2540	1921	2405	88	63	127	
ATOM	881	CD2	PHE	A	505	18.180	18.693	80.378	1.00	17.14		
ANISOU	881	CD2	PHE	A	505	2124	2146	2242	-31	127	75	
ATOM	882	CE1	PHE	A	505	18.948	16.092	80.033	1.00	18.58		
ANISOU	882	CE1	PHE	A	505	2396	2231	2434	-67	-149	100	
ATOM	883	CE2	PHE	A	505	18.672	17.998	81.465	1.00	19.19		
ANISOU	883	CE2	PHE	A	505	2488	2224	2580	85	-73	37	
ATOM	884	CZ	PHE	A	505	19.076	16.666	81.285	1.00	19.09		
ANISOU	884	CZ	PHE	A	505	2543	2145	2567	-38	14	-21	
ATOM	885	N	THR	A	506	14.924	20.959	77.350	1.00	16.31		
ANISOU	885	N	THR	A	506	1966	1857	2373	65	-100	195	
ATOM	886	CA	THR	A	506	14.430	21.983	76.447	1.00	17.01		
ANISOU	886	CA	THR	A	506	2326	1849	2288	-61	-134	102	
ATOM	887	C	THR	A	506	15.000	23.342	76.863	1.00	16.40		
ANISOU	887	C	THR	A	506	2127	1829	2274	28	-2	21	
ATOM	888	O	THR	A	506	14.522	23.974	77.846	1.00	17.48		
ANISOU	888	O	THR	A	506	2409	1929	2306	-19	19	23	
ATOM	889	CB	THR	A	506	12.872	22.057	76.476	1.00	17.01		
ANISOU	889	CB	THR	A	506	2206	1853	2404	-153	70	-69	
ATOM	890	OG1	THR	A	506	12.431	22.374	77.820	1.00	18.67		
ANISOU	890	OG1	THR	A	506	2514	2077	2504	-154	166	-42	
ATOM	891	CG2	THR	A	506	12.276	20.709	76.080	1.00	18.31		
ANISOU	891	CG2	THR	A	506	2451	1842	2664	-101	-151	-38	
ATOM	892	N	PRO	A	507	16.086	23.783	76.275	1.00	16.35		
ANISOU	892	N	PRO	A	507	2260	1805	2145	-18	52	-32	
ATOM	893	CA	PRO	A	507	16.660	25.108	76.490	1.00	15.56		
ANISOU	893	CA	PRO	A	507	1998	1800	2115	101	38	-174	
ATOM	894	C	PRO	A	507	15.641	26.138	75.973	1.00	15.81		
ANISOU	894	C	PRO	A	507	2151	1760	2096	-73	0	-12	
ATOM	895	O	PRO	A	507	14.941	25.945	74.979	1.00	16.44		
ANISOU	895	O	PRO	A	507	2347	1690	2208	58	8	190	
ATOM	896	CB	PRO	A	507	17.963	25.133	75.657	1.00	16.57		
ANISOU	896	CB	PRO	A	507	2099	2133	2063	-193	52	-133	
ATOM	897	CG	PRO	A	507	17.661	24.174	74.537	1.00	16.13		
ANISOU	897	CG	PRO	A	507	2028	1997	2102	-232	39	-127	
ATOM	898	CD	PRO	A	507	16.795	23.082	75.166	1.00	16.06		
ANISOU	898	CD	PRO	A	507	1964	2117	2022	-145	170	-38	
ATOM	899	N	ILE	A	508	15.512	27.211	76.780	1.00	15.49		
ANISOU	899	N	ILE	A	508	1821	1590	2476	207	94	21	
ATOM	900	CA	ILE	A	508	14.492	28.241	76.501	1.00	16.06		
ANISOU	900	CA	ILE	A	508	2189	1537	2375	146	-32	66	
ATOM	901	C	ILE	A	508	15.104	29.627	76.342	1.00	14.76		
ANISOU	901	C	ILE	A	508	1768	1682	2160	75	84	81	
ATOM	902	O	ILE	A	508	15.881	30.041	77.202	1.00	16.01		
ANISOU	902	O	ILE	A	508	2335	1501	2246	42	125	0	
ATOM	903	CB	ILE	A	508	13.540	28.264	77.698	1.00	17.17		
ANISOU	903	CB	ILE	A	508	1886	1924	2713	101	72	89	
ATOM	904	CG1	ILE	A	508	12.766	26.906	77.805	1.00	18.68		
ANISOU	904	CG1	ILE	A	508	2437	2058	2603	49	182	162	
ATOM	905	CG2	ILE	A	508	12.512	29.416	77.577	1.00	18.32		
ANISOU	905	CG2	ILE	A	508	2289	1951	2720	288	255	89	
ATOM	906	CD1	ILE	A	508	12.105	26.794	79.167	1.00	21.03		
ANISOU	906	CD1	ILE	A	508	2779	2685	2525	165	159	13	

ATOM	907	N	ASN	A	509	14.769	30.269	75.218	1.00	16.29		N
ANISOU	907	N	ASN	A	509	2216	1847	2125	67	11	41	N
ATOM	908	CA	ASN	A	509	15.243	31.625	74.991	1.00	16.80		C
ANISOU	908	CA	ASN	A	509	2221	1928	2234	-35	-23	-43	C
ATOM	909	C	ASN	A	509	14.106	32.539	75.453	1.00	18.14		C
ANISOU	909	C	ASN	A	509	2297	2141	2454	57	-4	-80	C
ATOM	910	O	ASN	A	509	12.941	32.250	75.139	1.00	21.01		O
ANISOU	910	O	ASN	A	509	2471	2365	3147	63	-232	-141	O
ATOM	911	CB	ASN	A	509	15.453	31.934	73.507	1.00	19.29		C
ANISOU	911	CB	ASN	A	509	2709	2328	2291	14	17	101	C
ATOM	912	CG	ASN	A	509	16.026	33.346	73.388	1.00	19.06		C
ANISOU	912	CG	ASN	A	509	2477	2244	2520	53	-147	69	C
ATOM	913	OD1	ASN	A	509	15.293	34.259	72.963	1.00	20.78		O
ANISOU	913	OD1	ASN	A	509	2749	2310	2836	182	-291	250	O
ATOM	914	ND2	ASN	A	509	17.304	33.535	73.676	1.00	18.78		N
ANISOU	914	ND2	ASN	A	509	2533	2406	2195	77	-80	262	N
ATOM	915	N	LEU	A	510	14.429	33.498	76.303	1.00	18.10		N
ANISOU	915	N	LEU	A	510	2188	2146	2542	126	-134	-165	N
ATOM	916	CA	LEU	A	510	13.405	34.404	76.826	1.00	20.12		C
ANISOU	916	CA	LEU	A	510	2447	2387	2812	150	82	-51	C
ATOM	917	C	LEU	A	510	13.677	35.792	76.249	1.00	22.23		C
ANISOU	917	C	LEU	A	510	2851	2477	3117	9	62	5	C
ATOM	918	O	LEU	A	510	14.658	36.428	76.654	1.00	21.24		O
ANISOU	918	O	LEU	A	510	2656	2501	2913	83	171	201	O
ATOM	919	CB	LEU	A	510	13.497	34.430	78.351	1.00	22.33		C
ANISOU	919	CB	LEU	A	510	2925	2691	2867	214	167	-78	C
ATOM	920	CG	LEU	A	510	13.138	33.057	78.971	1.00	25.04		C
ANISOU	920	CG	LEU	A	510	3471	2861	3181	-72	84	5	C
ATOM	921	CD1	LEU	A	510	13.746	32.940	80.370	1.00	27.03		C
ANISOU	921	CD1	LEU	A	510	3670	3299	3300	-117	-12	95	C
ATOM	922	CD2	LEU	A	510	11.649	32.824	79.011	1.00	26.25		C
ANISOU	922	CD2	LEU	A	510	3524	3043	3407	-11	8	74	C
ATOM	923	N	ASN	A	511	12.822	36.222	75.336	1.00	23.67		N
ANISOU	923	N	ASN	A	511	3078	2707	3207	14	-111	36	N
ATOM	924	CA	ASN	A	511	12.839	37.585	74.828	1.00	26.61		C
ANISOU	924	CA	ASN	A	511	3453	3017	3643	-8	51	284	C
ATOM	925	C	ASN	A	511	14.140	38.077	74.259	1.00	24.33		C
ANISOU	925	C	ASN	A	511	3173	2674	3396	111	-34	7	C
ATOM	926	O	ASN	A	511	14.493	39.265	74.368	1.00	23.65		O
ANISOU	926	O	ASN	A	511	3162	2356	3470	367	44	32	O
ATOM	927	CB	ASN	A	511	12.494	38.544	76.000	1.00	29.89		C
ANISOU	927	CB	ASN	A	511	4028	3487	3842	116	-38	62	C
ATOM	928	CG	ASN	A	511	11.173	38.196	76.663	1.00	34.64		C
ANISOU	928	CG	ASN	A	511	4283	4313	4568	-107	140	89	C
ATOM	929	OD1	ASN	A	511	10.153	38.126	75.973	1.00	36.77		O
ANISOU	929	OD1	ASN	A	511	4452	4802	4717	-42	-19	45	O
ATOM	930	ND2	ASN	A	511	11.208	37.969	77.978	1.00	37.35		N
ANISOU	930	ND2	ASN	A	511	4792	4745	4656	-83	-9	34	N
ATOM	931	N	GLN	A	512	14.927	37.179	73.659	1.00	22.30		N
ANISOU	931	N	GLN	A	512	2758	2502	3211	158	-22	256	N
ATOM	932	CA	GLN	A	512	16.230	37.545	73.105	1.00	21.51		C
ANISOU	932	CA	GLN	A	512	2922	2385	2868	126	51	214	C
ATOM	933	C	GLN	A	512	17.133	38.170	74.131	1.00	21.94		C
ANISOU	933	C	GLN	A	512	2912	2471	2953	318	0	88	C
ATOM	934	O	GLN	A	512	18.072	38.889	73.731	1.00	22.45		O
ANISOU	934	O	GLN	A	512	3027	2550	2951	175	-17	119	O
ATOM	935	CB	GLN	A	512	16.055	38.478	71.882	1.00	21.79		C
ANISOU	935	CB	GLN	A	512	3063	2399	2817	76	74	215	C
ATOM	936	CG	GLN	A	512	15.366	37.787	70.728	1.00	23.35		C
ANISOU	936	CG	GLN	A	512	3270	2775	2827	115	10	138	C
ATOM	937	CD	GLN	A	512	16.254	36.895	69.898	1.00	22.57		C
ANISOU	937	CD	GLN	A	512	2948	2714	2914	17	-43	101	C
ATOM	938	OE1	GLN	A	512	17.459	36.829	70.152	1.00	23.69		O
ANISOU	938	OE1	GLN	A	512	3046	2928	3029	403	-92	-177	O

ATOM	939	NE2	GLN	A	512	15.721	36.260	68.873	1.00	22.83		N
ANISOU	939	NE2	GLN	A	512	3131	2652	2890	97	-267	229	N
ATOM	940	N	SER	A	513	16.947	37.863	75.424	1.00	21.26		N
ANISOU	940	N	SER	A	513	3014	2102	2963	222	-10	104	N
ATOM	941	CA	SER	A	513	17.808	38.469	76.418	1.00	22.17		C
ANISOU	941	CA	SER	A	513	2947	2470	3006	102	-75	116	C
ATOM	942	C	SER	A	513	18.251	37.509	77.507	1.00	19.87		C
ANISOU	942	C	SER	A	513	2649	2135	2768	-92	70	38	C
ATOM	943	O	SER	A	513	19.119	37.874	78.252	1.00	19.87		O
ANISOU	943	O	SER	A	513	2798	1930	2822	-10	80	291	O
ATOM	944	CB	SER	A	513	17.108	39.688	77.039	1.00	25.47		C
ANISOU	944	CB	SER	A	513	3544	2743	3392	172	69	-97	C
ATOM	945	OG	SER	A	513	16.001	39.285	77.795	1.00	27.69		O
ANISOU	945	OG	SER	A	513	3642	3068	3810	241	217	-215	O
ATOM	946	N	HIS	A	514	17.661	36.294	77.584	1.00	19.42		N
ANISOU	946	N	HIS	A	514	2705	2009	2664	46	179	207	N
ATOM	947	CA	HIS	A	514	18.077	35.398	78.679	1.00	18.23		C
ANISOU	947	CA	HIS	A	514	2600	1942	2384	76	155	-16	C
ATOM	948	C	HIS	A	514	17.852	33.956	78.254	1.00	16.65		C
ANISOU	948	C	HIS	A	514	2091	1960	2275	3	97	-18	C
ATOM	949	O	HIS	A	514	17.070	33.726	77.331	1.00	18.87		O
ANISOU	949	O	HIS	A	514	2639	2068	2462	176	-225	164	O
ATOM	950	CB	HIS	A	514	17.171	35.673	79.900	1.00	18.92		C
ANISOU	950	CB	HIS	A	514	2673	2202	2315	6	188	112	C
ATOM	951	CG	HIS	A	514	17.591	34.942	81.132	1.00	19.11		C
ANISOU	951	CG	HIS	A	514	2472	2322	2468	89	136	70	C
ATOM	952	ND1	HIS	A	514	18.865	34.979	81.688	1.00	19.64		N
ANISOU	952	ND1	HIS	A	514	2736	2434	2293	169	110	164	N
ATOM	953	CD2	HIS	A	514	16.809	34.198	81.942	1.00	19.33		C
ANISOU	953	CD2	HIS	A	514	2766	2312	2266	190	221	-38	C
ATOM	954	CE1	HIS	A	514	18.834	34.229	82.799	1.00	20.67		C
ANISOU	954	CE1	HIS	A	514	2913	2558	2382	116	204	127	C
ATOM	955	NE2	HIS	A	514	17.611	33.760	82.956	1.00	18.73		N
ANISOU	955	NE2	HIS	A	514	2531	2269	2316	109	107	-78	N
ATOM	956	N	TRP	A	515	18.625	33.043	78.840	1.00	15.92		N
ANISOU	956	N	TRP	A	515	2444	1538	2069	-36	196	-66	N
ATOM	957	CA	TRP	A	515	18.452	31.617	78.550	1.00	15.22		C
ANISOU	957	CA	TRP	A	515	2159	1643	1980	-20	208	-57	C
ATOM	958	C	TRP	A	515	18.080	30.936	79.876	1.00	14.54		C
ANISOU	958	C	TRP	A	515	1759	1713	2052	33	265	-57	C
ATOM	959	O	TRP	A	515	18.694	31.235	80.873	1.00	15.86		O
ANISOU	959	O	TRP	A	515	2185	1588	2253	75	166	11	O
ATOM	960	CB	TRP	A	515	19.824	31.063	78.074	1.00	15.42		C
ANISOU	960	CB	TRP	A	515	2021	1862	1978	77	91	34	C
ATOM	961	CG	TRP	A	515	20.283	31.451	76.692	1.00	15.37		C
ANISOU	961	CG	TRP	A	515	1902	1948	1991	126	-47	153	C
ATOM	962	CD1	TRP	A	515	21.363	32.251	76.387	1.00	15.39		C
ANISOU	962	CD1	TRP	A	515	2241	1728	1878	61	-1	232	C
ATOM	963	CD2	TRP	A	515	19.731	31.037	75.433	1.00	14.53		C
ANISOU	963	CD2	TRP	A	515	1884	1593	2045	224	54	-11	C
ATOM	964	NE1	TRP	A	515	21.505	32.333	75.026	1.00	15.87		N
ANISOU	964	NE1	TRP	A	515	2067	2032	1932	-107	-121	94	N
ATOM	965	CE2	TRP	A	515	20.501	31.604	74.419	1.00	15.72		C
ANISOU	965	CE2	TRP	A	515	2216	1651	2106	64	-41	1	C
ATOM	966	CE3	TRP	A	515	18.659	30.194	75.094	1.00	16.46		C
ANISOU	966	CE3	TRP	A	515	2252	1816	2186	94	-211	-40	C
ATOM	967	CZ2	TRP	A	515	20.261	31.407	73.064	1.00	16.54		C
ANISOU	967	CZ2	TRP	A	515	2189	1984	2110	61	45	76	C
ATOM	968	CZ3	TRP	A	515	18.420	29.985	73.742	1.00	17.08		C
ANISOU	968	CZ3	TRP	A	515	2443	2024	2021	144	28	114	C
ATOM	969	CH2	TRP	A	515	19.202	30.604	72.747	1.00	16.82		C
ANISOU	969	CH2	TRP	A	515	2107	2095	2188	94	66	19	C
ATOM	970	N	ALA	A	516	17.177	29.933	79.790	1.00	15.66		N
ANISOU	970	N	ALA	A	516	2188	1663	2100	-43	248	88	N

ATOM	971	CA	ALA	A	516	16.818	29.128	80.964	1.00	15.16		C
ANISOU	971	CA	ALA	A	516	1918	1825	2019	-47	221	-70	C
ATOM	972	C	ALA	A	516	16.616	27.692	80.445	1.00	15.33		C
ANISOU	972	C	ALA	A	516	1861	1857	2107	-135	87	-64	C
ATOM	973	O	ALA	A	516	16.833	27.425	79.244	1.00	14.82		O
ANISOU	973	O	ALA	A	516	1910	1704	2018	-83	53	67	O
ATOM	974	CB	ALA	A	516	15.612	29.648	81.735	1.00	16.96		C
ANISOU	974	CB	ALA	A	516	2327	1740	2378	30	354	-70	C
ATOM	975	N	LEU	A	517	16.205	26.789	81.303	1.00	17.24		N
ANISOU	975	N	LEU	A	517	2556	1839	2157	-63	38	-68	N
ATOM	976	CA	LEU	A	517	16.102	25.382	80.859	1.00	16.67		C
ANISOU	976	CA	LEU	A	517	2261	1740	2331	-205	115	-18	C
ATOM	977	C	LEU	A	517	14.928	24.654	81.483	1.00	16.87		C
ANISOU	977	C	LEU	A	517	2301	1702	2408	-126	214	2	C
ATOM	978	O	LEU	A	517	14.633	24.806	82.660	1.00	17.92		O
ANISOU	978	O	LEU	A	517	2620	1695	2493	-226	46	-47	O
ATOM	979	CB	LEU	A	517	17.380	24.700	81.401	1.00	17.54		C
ANISOU	979	CB	LEU	A	517	2187	1807	2670	-79	140	-39	C
ATOM	980	CG	LEU	A	517	17.538	23.199	81.135	1.00	16.59		C
ANISOU	980	CG	LEU	A	517	2074	1810	2420	-31	92	-35	C
ATOM	981	CD1	LEU	A	517	17.695	22.984	79.632	1.00	18.96		C
ANISOU	981	CD1	LEU	A	517	2741	2017	2445	104	33	-124	C
ATOM	982	CD2	LEU	A	517	18.763	22.599	81.870	1.00	16.79		C
ANISOU	982	CD2	LEU	A	517	2199	1852	2331	49	76	-57	C
ATOM	983	N	GLY	A	518	14.300	23.846	80.615	1.00	16.34		N
ANISOU	983	N	GLY	A	518	1852	1842	2514	-188	65	28	N
ATOM	984	CA	GLY	A	518	13.259	22.949	81.118	1.00	17.73		C
ANISOU	984	CA	GLY	A	518	2289	1935	2511	-197	278	12	C
ATOM	985	C	GLY	A	518	13.857	21.543	81.157	1.00	18.49		C
ANISOU	985	C	GLY	A	518	2443	2060	2523	-97	170	45	C
ATOM	986	O	GLY	A	518	14.626	21.177	80.266	1.00	16.84		O
ANISOU	986	O	GLY	A	518	2257	1525	2616	-236	156	-18	O
ATOM	987	N	ILE	A	519	13.489	20.784	82.213	1.00	18.37		N
ANISOU	987	N	ILE	A	519	2462	2085	2432	-64	312	28	N
ATOM	988	CA	ILE	A	519	13.961	19.393	82.287	1.00	18.08		C
ANISOU	988	CA	ILE	A	519	2190	2084	2596	-166	65	106	C
ATOM	989	C	ILE	A	519	12.721	18.496	82.461	1.00	18.84		C
ANISOU	989	C	ILE	A	519	2477	2050	2632	-218	178	68	C
ATOM	990	O	ILE	A	519	12.097	18.576	83.513	1.00	18.98		O
ANISOU	990	O	ILE	A	519	2520	2015	2675	-390	236	113	O
ATOM	991	CB	ILE	A	519	14.928	19.165	83.434	1.00	18.19		C
ANISOU	991	CB	ILE	A	519	2571	1902	2437	-31	65	277	C
ATOM	992	CG1	ILE	A	519	16.160	20.087	83.379	1.00	18.07		C
ANISOU	992	CG1	ILE	A	519	2194	2251	2421	-33	-20	117	C
ATOM	993	CG2	ILE	A	519	15.457	17.705	83.457	1.00	18.79		C
ANISOU	993	CG2	ILE	A	519	2457	1978	2706	89	32	147	C
ATOM	994	CD1	ILE	A	519	17.203	19.991	84.485	1.00	19.76		C
ANISOU	994	CD1	ILE	A	519	2621	2656	2233	-209	29	161	C
ATOM	995	N	ILE	A	520	12.411	17.704	81.455	1.00	18.78		N
ANISOU	995	N	ILE	A	520	2245	2275	2616	-395	131	158	N
ATOM	996	CA	ILE	A	520	11.299	16.725	81.676	1.00	19.96		C
ANISOU	996	CA	ILE	A	520	2445	2272	2866	-295	185	77	C
ATOM	997	C	ILE	A	520	11.989	15.440	82.129	1.00	20.99		C
ANISOU	997	C	ILE	A	520	2539	2467	2968	-177	92	40	C
ATOM	998	O	ILE	A	520	12.770	14.877	81.375	1.00	20.55		O
ANISOU	998	O	ILE	A	520	3031	1906	2869	-193	197	-63	O
ATOM	999	CB	ILE	A	520	10.583	16.508	80.366	1.00	19.40		C
ANISOU	999	CB	ILE	A	520	2298	2316	2757	-260	177	29	C
ATOM	1000	CG1	ILE	A	520	9.862	17.790	79.936	1.00	21.11		C
ANISOU	1000	CG1	ILE	A	520	2590	2625	2806	12	95	23	C
ATOM	1001	CG2	ILE	A	520	9.585	15.324	80.398	1.00	20.96		C
ANISOU	1001	CG2	ILE	A	520	2654	2379	2933	-392	102	-83	C
ATOM	1002	CD1	ILE	A	520	9.506	17.824	78.463	1.00	22.20		C
ANISOU	1002	CD1	ILE	A	520	2753	2912	2769	-36	130	99	C

ATOM	1003	N	ASP	A	521	11.704	14.978	83.334	1.00	23.09		N
ANISOU	1003	N	ASP	A	521	3058	2744	2971	-180	38	13	N
ATOM	1004	CA	ASP	A	521	12.301	13.744	83.832	1.00	23.20		C
ANISOU	1004	CA	ASP	A	521	2777	2744	3294	-218	31	81	C
ATOM	1005	C	ASP	A	521	11.200	12.666	83.801	1.00	23.64		C
ANISOU	1005	C	ASP	A	521	3012	2765	3204	-287	-55	29	C
ATOM	1006	O	ASP	A	521	10.411	12.644	84.734	1.00	22.75		O
ANISOU	1006	O	ASP	A	521	2999	2369	3276	-408	8	-135	O
ATOM	1007	CB	ASP	A	521	12.816	13.930	85.247	1.00	25.50		C
ANISOU	1007	CB	ASP	A	521	3215	3212	3263	-161	60	42	C
ATOM	1008	CG	ASP	A	521	13.805	12.842	85.638	1.00	27.77		C
ANISOU	1008	CG	ASP	A	521	3326	3511	3714	48	28	96	C
ATOM	1009	OD1	ASP	A	521	13.532	11.677	85.267	1.00	28.61		O
ANISOU	1009	OD1	ASP	A	521	3384	3609	3878	-30	-11	78	O
ATOM	1010	OD2	ASP	A	521	14.841	13.167	86.293	1.00	30.97		O
ANISOU	1010	OD2	ASP	A	521	3687	4027	4054	-123	-37	30	O
ATOM	1011	N	LEU	A	522	11.239	11.868	82.746	1.00	24.20		N
ANISOU	1011	N	LEU	A	522	3116	2732	3348	-304	127	26	N
ATOM	1012	CA	LEU	A	522	10.199	10.834	82.599	1.00	25.59		C
ANISOU	1012	CA	LEU	A	522	3039	3104	3579	-334	-29	46	C
ATOM	1013	C	LEU	A	522	10.306	9.771	83.657	1.00	27.15		C
ANISOU	1013	C	LEU	A	522	3284	3354	3677	-85	58	163	C
ATOM	1014	O	LEU	A	522	9.276	9.216	84.106	1.00	27.20		O
ANISOU	1014	O	LEU	A	522	3334	3290	3711	-238	-74	258	O
ATOM	1015	CB	LEU	A	522	10.309	10.306	81.137	1.00	26.24		C
ANISOU	1015	CB	LEU	A	522	3236	3094	3640	-249	56	-64	C
ATOM	1016	CG	LEU	A	522	10.044	11.460	80.162	1.00	29.23		C
ANISOU	1016	CG	LEU	A	522	3716	3702	3687	105	-2	91	C
ATOM	1017	CD1	LEU	A	522	10.999	11.499	78.980	1.00	28.63		C
ANISOU	1017	CD1	LEU	A	522	3741	3414	3724	56	72	122	C
ATOM	1018	CD2	LEU	A	522	8.578	11.590	79.786	1.00	28.59		C
ANISOU	1018	CD2	LEU	A	522	3622	3424	3818	-180	26	35	C
ATOM	1019	N	LYS	A	523	11.518	9.444	84.086	1.00	29.20		N
ANISOU	1019	N	LYS	A	523	3423	3708	3964	-255	-71	154	N
ATOM	1020	CA	LYS	A	523	11.695	8.410	85.115	1.00	31.44		C
ANISOU	1020	CA	LYS	A	523	4022	3843	4080	6	-98	154	C
ATOM	1021	C	LYS	A	523	11.222	8.884	86.469	1.00	30.80		C
ANISOU	1021	C	LYS	A	523	3802	3719	4183	7	-3	128	C
ATOM	1022	O	LYS	A	523	10.569	8.154	87.225	1.00	31.37		O
ANISOU	1022	O	LYS	A	523	3915	3689	4314	-42	-65	297	O
ATOM	1023	CB	LYS	A	523	13.175	8.019	85.128	1.00	34.12		C
ANISOU	1023	CB	LYS	A	523	4074	4323	4568	-45	54	5	C
ATOM	1024	CG	LYS	A	523	13.656	7.079	86.201	1.00	38.10		C
ANISOU	1024	CG	LYS	A	523	4961	4694	4822	99	-15	141	C
ATOM	1025	CD	LYS	A	523	15.127	7.308	86.553	1.00	41.94		C
ANISOU	1025	CD	LYS	A	523	5187	5312	5435	1	-91	16	C
ATOM	1026	CE	LYS	A	523	16.040	7.405	85.343	1.00	44.32		C
ANISOU	1026	CE	LYS	A	523	5651	5660	5529	60	95	55	C
ATOM	1027	NZ	LYS	A	523	17.378	7.975	85.628	1.00	46.06		N
ANISOU	1027	NZ	LYS	A	523	5831	5913	5756	-60	-93	21	N
ATOM	1028	N	LYS	A	524	11.497	10.140	86.836	1.00	29.18		N
ANISOU	1028	N	LYS	A	524	3695	3597	3795	-13	-75	142	N
ATOM	1029	CA	LYS	A	524	11.062	10.677	88.120	1.00	28.80		C
ANISOU	1029	CA	LYS	A	524	3580	3516	3846	66	-20	123	C
ATOM	1030	C	LYS	A	524	9.664	11.283	88.059	1.00	26.40		C
ANISOU	1030	C	LYS	A	524	3340	3146	3544	-159	24	69	C
ATOM	1031	O	LYS	A	524	9.092	11.648	89.103	1.00	27.09		O
ANISOU	1031	O	LYS	A	524	3377	3269	3647	-24	35	106	O
ATOM	1032	CB	LYS	A	524	12.032	11.744	88.654	1.00	29.66		C
ANISOU	1032	CB	LYS	A	524	3768	3683	3818	-69	10	39	C
ATOM	1033	CG	LYS	A	524	13.466	11.227	88.794	1.00	32.19		C
ANISOU	1033	CG	LYS	A	524	3842	4190	4197	50	-12	56	C
ATOM	1034	CD	LYS	A	524	14.444	12.342	89.164	1.00	34.05		C
ANISOU	1034	CD	LYS	A	524	4289	4315	4334	-87	1	-29	C

ATOM	1035	CE	LYS	A	524	15.909	12.024	89.102	1.00	34.85		C
ANISOU	1035	CE	LYS	A	524	4336	4517	4389	-39	-25	-51	C
ATOM	1036	NZ	LYS	A	524	16.514	11.646	87.793	1.00	34.69		N
ANISOU	1036	NZ	LYS	A	524	4213	4629	4338	-165	53	97	N
ATOM	1037	N	LYS	A	525	9.092	11.343	86.867	1.00	24.54		N
ANISOU	1037	N	LYS	A	525	3232	2630	3462	-213	127	220	N
ATOM	1038	CA	LYS	A	525	7.767	11.927	86.682	1.00	25.62		C
ANISOU	1038	CA	LYS	A	525	3131	3067	3538	-250	214	146	C
ATOM	1039	C	LYS	A	525	7.744	13.356	87.188	1.00	26.16		C
ANISOU	1039	C	LYS	A	525	3279	3153	3508	-149	284	59	C
ATOM	1040	O	LYS	A	525	6.892	13.789	87.970	1.00	24.65		O
ANISOU	1040	O	LYS	A	525	3034	2685	3646	-142	296	30	O
ATOM	1041	CB	LYS	A	525	6.677	11.085	87.430	1.00	27.03		C
ANISOU	1041	CB	LYS	A	525	3332	3291	3646	-308	276	240	C
ATOM	1042	CG	LYS	A	525	6.569	9.777	86.665	1.00	29.09		C
ANISOU	1042	CG	LYS	A	525	3763	3577	3712	-275	138	23	C
ATOM	1043	CD	LYS	A	525	5.263	9.009	86.934	1.00	31.07		C
ANISOU	1043	CD	LYS	A	525	3931	3731	4144	-391	169	102	C
ATOM	1044	CE	LYS	A	525	5.340	7.779	86.019	1.00	32.76		C
ANISOU	1044	CE	LYS	A	525	4224	3964	4260	-113	121	-40	C
ATOM	1045	NZ	LYS	A	525	4.799	7.982	84.634	1.00	32.11		N
ANISOU	1045	NZ	LYS	A	525	4195	3735	4271	-247	160	134	N
ATOM	1046	N	THR	A	526	8.700	14.171	86.714	1.00	25.53		N
ANISOU	1046	N	THR	A	526	3122	3163	3415	-168	239	97	N
ATOM	1047	CA	THR	A	526	8.746	15.561	87.174	1.00	26.25		C
ANISOU	1047	CA	THR	A	526	3440	3213	3320	-8	257	25	C
ATOM	1048	C	THR	A	526	9.073	16.477	86.000	1.00	25.67		C
ANISOU	1048	C	THR	A	526	3244	3074	3435	-154	227	28	C
ATOM	1049	O	THR	A	526	9.617	15.957	85.041	1.00	24.31		O
ANISOU	1049	O	THR	A	526	3257	2538	3443	-243	304	112	O
ATOM	1050	CB	THR	A	526	9.789	15.899	88.241	1.00	27.95		C
ANISOU	1050	CB	THR	A	526	3353	3631	3636	6	115	66	C
ATOM	1051	OG1	THR	A	526	11.134	15.610	87.757	1.00	28.65		O
ANISOU	1051	OG1	THR	A	526	3431	3840	3617	-23	231	38	O
ATOM	1052	CG2	THR	A	526	9.626	15.163	89.556	1.00	29.00		C
ANISOU	1052	CG2	THR	A	526	3572	3855	3591	-71	213	22	C
ATOM	1053	N	ILE	A	527	8.557	17.689	86.045	1.00	26.15		N
ANISOU	1053	N	ILE	A	527	3520	2973	3442	-183	293	93	N
ATOM	1054	CA	ILE	A	527	8.913	18.681	85.013	1.00	25.72		C
ANISOU	1054	CA	ILE	A	527	3438	3005	3331	-268	311	-10	C
ATOM	1055	C	ILE	A	527	9.538	19.836	85.805	1.00	25.92		C
ANISOU	1055	C	ILE	A	527	3337	2983	3528	-269	322	-38	C
ATOM	1056	O	ILE	A	527	8.884	20.394	86.696	1.00	25.19		O
ANISOU	1056	O	ILE	A	527	3346	2724	3502	-384	382	36	O
ATOM	1057	CB	ILE	A	527	7.782	19.182	84.149	1.00	27.76		C
ANISOU	1057	CB	ILE	A	527	3756	3288	3503	-198	185	118	C
ATOM	1058	CG1	ILE	A	527	7.127	17.969	83.496	1.00	28.22		C
ANISOU	1058	CG1	ILE	A	527	3810	3383	3529	-198	-1	116	C
ATOM	1059	CG2	ILE	A	527	8.299	20.211	83.130	1.00	27.06		C
ANISOU	1059	CG2	ILE	A	527	3894	3026	3359	-121	105	49	C
ATOM	1060	CD1	ILE	A	527	6.196	18.128	82.355	1.00	28.80		C
ANISOU	1060	CD1	ILE	A	527	3371	3693	3879	-214	-27	149	C
ATOM	1061	N	GLY	A	528	10.773	20.197	85.417	1.00	23.68		N
ANISOU	1061	N	GLY	A	528	3179	2589	3230	-100	322	-67	N
ATOM	1062	CA	GLY	A	528	11.439	21.235	86.200	1.00	22.81		C
ANISOU	1062	CA	GLY	A	528	3073	2565	3030	-163	179	105	C
ATOM	1063	C	GLY	A	528	11.870	22.408	85.327	1.00	21.82		C
ANISOU	1063	C	GLY	A	528	2935	2571	2784	-210	302	13	C
ATOM	1064	O	GLY	A	528	12.145	22.227	84.130	1.00	21.67		O
ANISOU	1064	O	GLY	A	528	3434	2090	2709	-316	324	118	O
ATOM	1065	N	TYR	A	529	11.827	23.570	85.943	1.00	19.07		N
ANISOU	1065	N	TYR	A	529	2557	2264	2423	-228	432	288	N
ATOM	1066	CA	TYR	A	529	12.249	24.815	85.244	1.00	19.32		C
ANISOU	1066	CA	TYR	A	529	2534	2140	2667	-71	173	302	C

ATOM	1067	C	TYR	A	529	13.436	25.315	86.040	1.00	20.01		C
ANISOU	1067	C	TYR	A	529	2649	2308	2646	-15	174	67	C
ATOM	1068	O	TYR	A	529	13.318	25.491	87.260	1.00	20.14		O
ANISOU	1068	O	TYR	A	529	2515	2533	2604	-316	392	139	O
ATOM	1069	CB	TYR	A	529	11.101	25.844	85.232	1.00	19.92		C
ANISOU	1069	CB	TYR	A	529	2567	2258	2741	-13	180	66	C
ATOM	1070	CG	TYR	A	529	11.593	27.177	84.663	1.00	19.55		C
ANISOU	1070	CG	TYR	A	529	2497	2303	2629	-87	180	65	C
ATOM	1071	CD1	TYR	A	529	11.836	27.317	83.300	1.00	19.22		C
ANISOU	1071	CD1	TYR	A	529	2345	2387	2573	-129	118	52	C
ATOM	1072	CD2	TYR	A	529	11.825	28.242	85.498	1.00	21.21		C
ANISOU	1072	CD2	TYR	A	529	2756	2502	2800	-136	192	-9	C
ATOM	1073	CE1	TYR	A	529	12.275	28.523	82.766	1.00	19.18		C
ANISOU	1073	CE1	TYR	A	529	2320	2392	2573	-195	69	-36	C
ATOM	1074	CE2	TYR	A	529	12.292	29.454	84.977	1.00	20.66		C
ANISOU	1074	CE2	TYR	A	529	2508	2470	2873	-167	199	44	C
ATOM	1075	CZ	TYR	A	529	12.478	29.588	83.629	1.00	19.62		C
ANISOU	1075	CZ	TYR	A	529	2545	2147	2763	-154	133	-1	C
ATOM	1076	OH	TYR	A	529	12.986	30.765	83.079	1.00	20.48		O
ANISOU	1076	OH	TYR	A	529	2570	2316	2897	-321	401	29	O
ATOM	1077	N	VAL	A	530	14.599	25.509	85.419	1.00	19.71		N
ANISOU	1077	N	VAL	A	530	2583	2184	2721	-161	244	215	N
ATOM	1078	CA	VAL	A	530	15.818	25.864	86.151	1.00	19.51		C
ANISOU	1078	CA	VAL	A	530	2619	2202	2591	-49	261	158	C
ATOM	1079	C	VAL	A	530	16.382	27.118	85.501	1.00	18.62		C
ANISOU	1079	C	VAL	A	530	2445	2200	2429	-134	225	21	C
ATOM	1080	O	VAL	A	530	16.599	27.123	84.306	1.00	19.34		O
ANISOU	1080	O	VAL	A	530	2687	2294	2367	-271	166	61	O
ATOM	1081	CB	VAL	A	530	16.807	24.679	86.249	1.00	21.91		C
ANISOU	1081	CB	VAL	A	530	2857	2345	3124	-36	187	52	C
ATOM	1082	CG1	VAL	A	530	17.413	24.267	84.933	1.00	24.00		C
ANISOU	1082	CG1	VAL	A	530	3085	2880	3154	43	244	34	C
ATOM	1083	CG2	VAL	A	530	17.857	24.947	87.297	1.00	22.89		C
ANISOU	1083	CG2	VAL	A	530	2902	2691	3104	182	80	1	C
ATOM	1084	N	ASP	A	531	16.541	28.148	86.313	1.00	18.01		N
ANISOU	1084	N	ASP	A	531	2426	1966	2452	-183	389	124	N
ATOM	1085	CA	ASP	A	531	16.922	29.466	85.757	1.00	17.65		C
ANISOU	1085	CA	ASP	A	531	2484	1877	2344	-179	246	29	C
ATOM	1086	C	ASP	A	531	18.005	30.005	86.684	1.00	17.93		C
ANISOU	1086	C	ASP	A	531	2407	2089	2317	-161	142	112	C
ATOM	1087	O	ASP	A	531	17.778	30.190	87.888	1.00	19.21		O
ANISOU	1087	O	ASP	A	531	2771	2146	2384	-125	233	-33	O
ATOM	1088	CB	ASP	A	531	15.637	30.285	85.686	1.00	18.96		C
ANISOU	1088	CB	ASP	A	531	2561	2170	2472	-54	84	46	C
ATOM	1089	CG	ASP	A	531	15.766	31.672	85.084	1.00	19.66		C
ANISOU	1089	CG	ASP	A	531	2837	2185	2448	25	86	15	C
ATOM	1090	OD1	ASP	A	531	16.844	32.274	85.205	1.00	20.25		O
ANISOU	1090	OD1	ASP	A	531	2842	2265	2585	2	151	94	O
ATOM	1091	OD2	ASP	A	531	14.731	32.150	84.536	1.00	19.95		O
ANISOU	1091	OD2	ASP	A	531	2846	2166	2567	-31	43	240	O
ATOM	1092	N	SER	A	532	19.120	30.473	86.080	1.00	17.40		N
ANISOU	1092	N	SER	A	532	2264	1902	2446	-72	297	-76	N
ATOM	1093	CA	SER	A	532	20.242	30.997	86.832	1.00	18.39		C
ANISOU	1093	CA	SER	A	532	2611	2139	2239	65	64	-49	C
ATOM	1094	C	SER	A	532	20.136	32.508	87.153	1.00	18.84		C
ANISOU	1094	C	SER	A	532	2556	2203	2400	-177	156	-105	C
ATOM	1095	O	SER	A	532	21.073	33.027	87.750	1.00	18.74		O
ANISOU	1095	O	SER	A	532	2671	2009	2441	-196	152	-251	O
ATOM	1096	CB	SER	A	532	21.592	30.748	86.133	1.00	17.93		C
ANISOU	1096	CB	SER	A	532	2371	2432	2008	-23	14	97	C
ATOM	1097	OG	SER	A	532	21.558	31.336	84.814	1.00	17.00		O
ANISOU	1097	OG	SER	A	532	2459	2032	1970	45	31	69	O
ATOM	1098	N	LEU	A	533	19.032	33.127	86.821	1.00	19.85		N
ANISOU	1098	N	LEU	A	533	2745	2151	2645	-51	165	-141	N

ATOM	1099	CA	LEU	A	533	18.818	34.515	87.294	1.00	21.71		C
ANISOU	1099	CA	LEU	A	533	3000	2246	3002	103	143	-166	C
ATOM	1100	C	LEU	A	533	17.338	34.623	87.615	1.00	23.14		C
ANISOU	1100	C	LEU	A	533	2965	2634	3193	-16	25	-200	C
ATOM	1101	O	LEU	A	533	16.559	35.275	86.940	1.00	24.86		O
ANISOU	1101	O	LEU	A	533	3149	3073	3224	203	-39	-264	O
ATOM	1102	CB	LEU	A	533	19.395	35.556	86.329	1.00	24.34		C
ANISOU	1102	CB	LEU	A	533	3307	2753	3186	-43	112	53	C
ATOM	1103	CG	LEU	A	533	19.592	36.950	86.969	1.00	27.67		C
ANISOU	1103	CG	LEU	A	533	3878	3059	3577	-9	-7	-174	C
ATOM	1104	CD1	LEU	A	533	20.617	36.899	88.082	1.00	28.13		C
ANISOU	1104	CD1	LEU	A	533	3716	3229	3745	-53	-34	-148	C
ATOM	1105	CD2	LEU	A	533	20.033	37.930	85.892	1.00	29.92		C
ANISOU	1105	CD2	LEU	A	533	3970	3511	3887	-111	88	17	C
ATOM	1106	N	SER	A	534	16.952	33.948	88.691	1.00	25.11		N
ANISOU	1106	N	SER	A	534	3066	3104	3372	7	133	-128	N
ATOM	1107	CA	SER	A	534	15.539	33.920	89.094	1.00	29.12		C
ANISOU	1107	CA	SER	A	534	3196	3881	3988	-80	190	9	C
ATOM	1108	C	SER	A	534	15.349	34.300	90.550	1.00	33.77		C
ANISOU	1108	C	SER	A	534	4280	4419	4134	-194	87	-119	C
ATOM	1109	O	SER	A	534	16.094	33.806	91.401	1.00	34.44		O
ANISOU	1109	O	SER	A	534	4366	4668	4052	-165	174	-72	O
ATOM	1110	CB	SER	A	534	15.093	32.458	88.916	1.00	29.92		C
ANISOU	1110	CB	SER	A	534	3380	3929	4061	-138	236	-206	C
ATOM	1111	OG	SER	A	534	13.809	32.243	89.499	1.00	30.70		O
ANISOU	1111	OG	SER	A	534	3575	3946	4142	-250	236	-478	O
ATOM	1112	N	ASN	A	535	14.266	35.000	90.853	1.00	38.52		N
ANISOU	1112	N	ASN	A	535	4635	4858	5144	-4	91	-59	N
ATOM	1113	CA	ASN	A	535	13.945	35.281	92.263	1.00	42.88		C
ANISOU	1113	CA	ASN	A	535	5476	5575	5240	-52	104	-85	C
ATOM	1114	C	ASN	A	535	12.969	34.223	92.783	1.00	43.94		C
ANISOU	1114	C	ASN	A	535	5602	5574	5519	-83	98	-69	C
ATOM	1115	O	ASN	A	535	12.632	34.188	93.981	1.00	45.16		O
ANISOU	1115	O	ASN	A	535	5794	5834	5529	-62	126	-57	O
ATOM	1116	CB	ASN	A	535	13.426	36.693	92.496	1.00	45.09		C
ANISOU	1116	CB	ASN	A	535	5725	5679	5729	67	19	-85	C
ATOM	1117	CG	ASN	A	535	14.484	37.713	92.100	1.00	46.65		C
ANISOU	1117	CG	ASN	A	535	5922	5870	5934	-51	50	-47	C
ATOM	1118	OD1	ASN	A	535	15.647	37.604	92.509	1.00	47.97		O
ANISOU	1118	OD1	ASN	A	535	6025	6115	6085	-9	-45	-24	O
ATOM	1119	ND2	ASN	A	535	14.074	38.675	91.291	1.00	47.55		N
ANISOU	1119	ND2	ASN	A	535	6070	5977	6019	-7	-34	-26	N
ATOM	1120	N	GLY	A	536	12.547	33.322	91.888	1.00	43.16		N
ANISOU	1120	N	GLY	A	536	5433	5605	5360	-84	167	-75	N
ATOM	1121	CA	GLY	A	536	11.720	32.219	92.314	1.00	42.57		C
ANISOU	1121	CA	GLY	A	536	5433	5440	5300	-46	75	-137	C
ATOM	1122	C	GLY	A	536	10.448	32.026	91.523	1.00	41.44		C
ANISOU	1122	C	GLY	A	536	5306	5268	5172	28	180	-107	C
ATOM	1123	O	GLY	A	536	10.131	32.713	90.550	1.00	39.62		O
ANISOU	1123	O	GLY	A	536	4959	4833	5261	114	206	-212	O
ATOM	1124	N	PRO	A	537	9.723	30.984	91.954	1.00	41.72		N
ANISOU	1124	N	PRO	A	537	5401	5191	5259	-40	70	-135	N
ATOM	1125	CA	PRO	A	537	8.483	30.615	91.290	1.00	41.96		C
ANISOU	1125	CA	PRO	A	537	5303	5353	5288	-2	71	-64	C
ATOM	1126	C	PRO	A	537	7.735	31.886	90.963	1.00	42.20		C
ANISOU	1126	C	PRO	A	537	5449	5319	5267	-37	26	13	C
ATOM	1127	O	PRO	A	537	7.541	32.752	91.840	1.00	43.58		O
ANISOU	1127	O	PRO	A	537	5645	5509	5405	-72	73	-119	O
ATOM	1128	CB	PRO	A	537	7.775	29.709	92.267	1.00	41.74		C
ANISOU	1128	CB	PRO	A	537	5338	5221	5301	-24	57	-95	C
ATOM	1129	CG	PRO	A	537	8.837	29.154	93.161	1.00	42.31		C
ANISOU	1129	CG	PRO	A	537	5387	5305	5385	-51	26	-60	C
ATOM	1130	CD	PRO	A	537	10.021	30.077	93.079	1.00	41.98		C
ANISOU	1130	CD	PRO	A	537	5279	5392	5279	-36	56	-94	C

ATOM	1131	N	ASN	A	538	7.373	32.010	89.698	1.00	40.61	
ANISOU	1131	N	ASN	A	538	5152	5124	5155	-133	72	-84
ATOM	1132	CA	ASN	A	538	6.665	33.207	89.241	1.00	40.39	
ANISOU	1132	CA	ASN	A	538	5000	5184	5163	-68	83	-29
ATOM	1133	C	ASN	A	538	5.666	32.746	88.191	1.00	40.25	
ANISOU	1133	C	ASN	A	538	5117	5067	5110	-62	90	-49
ATOM	1134	O	ASN	A	538	5.601	31.531	87.935	1.00	38.37	
ANISOU	1134	O	ASN	A	538	4756	5040	4784	-16	181	-116
ATOM	1135	CB	ASN	A	538	7.631	34.252	88.746	1.00	40.79	
ANISOU	1135	CB	ASN	A	538	5146	5171	5181	-104	40	-56
ATOM	1136	CG	ASN	A	538	8.113	34.344	87.324	1.00	40.60	
ANISOU	1136	CG	ASN	A	538	4958	5219	5247	-122	124	-86
ATOM	1137	OD1	ASN	A	538	7.702	33.768	86.304	1.00	39.52	
ANISOU	1137	OD1	ASN	A	538	4663	5054	5297	-206	276	-173
ATOM	1138	ND2	ASN	A	538	9.072	35.272	87.179	1.00	39.93	
ANISOU	1138	ND2	ASN	A	538	4863	5104	5205	-82	84	-126
ATOM	1139	N	ALA	A	539	4.879	33.635	87.608	1.00	40.78	
ANISOU	1139	N	ALA	A	539	5169	5078	5245	-3	85	-37
ATOM	1140	CA	ALA	A	539	3.881	33.169	86.653	1.00	42.07	
ANISOU	1140	CA	ALA	A	539	5313	5294	5379	-94	30	-93
ATOM	1141	C	ALA	A	539	4.394	32.797	85.284	1.00	41.87	
ANISOU	1141	C	ALA	A	539	5126	5298	5486	-154	184	-81
ATOM	1142	O	ALA	A	539	3.795	31.916	84.631	1.00	42.02	
ANISOU	1142	O	ALA	A	539	4965	5298	5702	-109	146	-169
ATOM	1143	CB	ALA	A	539	2.715	34.130	86.525	1.00	42.83	
ANISOU	1143	CB	ALA	A	539	5446	5328	5500	-33	-41	-28
ATOM	1144	N	MET	A	540	5.467	33.394	84.771	1.00	39.76	
ANISOU	1144	N	MET	A	540	4991	4816	5300	-88	88	-104
ATOM	1145	CA	MET	A	540	5.943	33.051	83.437	1.00	38.59	
ANISOU	1145	CA	MET	A	540	4789	4594	5278	-57	91	-65
ATOM	1146	C	MET	A	540	6.507	31.619	83.445	1.00	34.13	
ANISOU	1146	C	MET	A	540	3847	4429	4691	-227	158	-6
ATOM	1147	O	MET	A	540	6.464	30.884	82.468	1.00	33.31	
ANISOU	1147	O	MET	A	540	3620	4010	5025	-131	272	-88
ATOM	1148	CB	MET	A	540	7.086	33.962	82.977	1.00	41.08	
ANISOU	1148	CB	MET	A	540	4953	5188	5467	-187	151	74
ATOM	1149	CG	MET	A	540	7.068	35.406	83.355	1.00	43.85	
ANISOU	1149	CG	MET	A	540	5580	5375	5705	-6	20	-53
ATOM	1150	SD	MET	A	540	5.603	36.403	83.157	1.00	46.11	
ANISOU	1150	SD	MET	A	540	5627	5748	6147	125	-70	-87
ATOM	1151	CE	MET	A	540	4.761	35.658	81.751	1.00	46.44	
ANISOU	1151	CE	MET	A	540	5900	5811	5933	78	-64	33
ATOM	1152	N	SER	A	541	7.070	31.282	84.564	1.00	31.86	
ANISOU	1152	N	SER	A	541	3746	3817	4544	-158	418	21
ATOM	1153	CA	SER	A	541	7.710	29.986	84.853	1.00	31.27	
ANISOU	1153	CA	SER	A	541	3578	3869	4433	-112	282	-17
ATOM	1154	C	SER	A	541	6.585	28.941	84.861	1.00	30.32	
ANISOU	1154	C	SER	A	541	3649	3616	4256	-71	225	-115
ATOM	1155	O	SER	A	541	6.751	27.800	84.465	1.00	27.86	
ANISOU	1155	O	SER	A	541	2924	3616	4046	-18	555	-162
ATOM	1156	CB	SER	A	541	8.515	30.046	86.103	1.00	33.71	
ANISOU	1156	CB	SER	A	541	4081	4255	4472	-199	121	-73
ATOM	1157	OG	SER	A	541	8.029	29.890	87.404	1.00	35.03	
ANISOU	1157	OG	SER	A	541	4054	4791	4464	-143	144	-374
ATOM	1158	N	PHE	A	542	5.397	29.413	85.315	1.00	28.90	
ANISOU	1158	N	PHE	A	542	3328	3510	4142	-72	146	-51
ATOM	1159	CA	PHE	A	542	4.279	28.441	85.248	1.00	30.40	
ANISOU	1159	CA	PHE	A	542	3529	3766	4258	-158	163	-100
ATOM	1160	C	PHE	A	542	3.792	28.145	83.865	1.00	28.18	
ANISOU	1160	C	PHE	A	542	3090	3480	4137	-38	262	-87
ATOM	1161	O	PHE	A	542	3.495	26.954	83.605	1.00	28.28	
ANISOU	1161	O	PHE	A	542	2991	3444	4308	-17	294	-186
ATOM	1162	CB	PHE	A	542	3.115	28.992	86.067	1.00	32.99	
ANISOU	1162	CB	PHE	A	542	3889	4161	4487	-22	290	-115

ATOM	1163	CG	PHE	A	542	3.352	28.591	87.485	1.00	35.58		C
ANISOU	1163	CG	PHE	A	542	4335	4609	4575	-27	50	-3	C
ATOM	1164	CD1	PHE	A	542	3.521	29.567	88.444	1.00	37.40		C
ANISOU	1164	CD1	PHE	A	542	4758	4693	4760	-87	33	-70	C
ATOM	1165	CD2	PHE	A	542	3.359	27.251	87.839	1.00	37.35		C
ANISOU	1165	CD2	PHE	A	542	4793	4650	4749	22	48	-16	C
ATOM	1166	CE1	PHE	A	542	3.724	29.213	89.767	1.00	38.62		C
ANISOU	1166	CE1	PHE	A	542	4869	4968	4838	31	-6	49	C
ATOM	1167	CE2	PHE	A	542	3.576	26.892	89.156	1.00	38.49		C
ANISOU	1167	CE2	PHE	A	542	4888	4957	4780	-50	10	15	C
ATOM	1168	CZ	PHE	A	542	3.739	27.878	90.110	1.00	38.82		C
ANISOU	1168	CZ	PHE	A	542	4945	4898	4908	-47	12	-23	C
ATOM	1169	N	ALA	A	543	3.679	29.131	82.988	1.00	27.61		N
ANISOU	1169	N	ALA	A	543	3063	3463	3966	-24	176	-153	N
ATOM	1170	CA	ALA	A	543	3.312	28.898	81.608	1.00	28.18		C
ANISOU	1170	CA	ALA	A	543	3316	3458	3934	62	109	-32	C
ATOM	1171	C	ALA	A	543	4.315	27.934	80.978	1.00	27.24		C
ANISOU	1171	C	ALA	A	543	3100	3419	3832	-39	-43	-41	C
ATOM	1172	O	ALA	A	543	3.891	27.090	80.197	1.00	27.41		O
ANISOU	1172	O	ALA	A	543	3093	3300	4021	-91	43	-34	O
ATOM	1173	CB	ALA	A	543	3.207	30.162	80.775	1.00	30.56		C
ANISOU	1173	CB	ALA	A	543	3874	3596	4141	47	28	63	C
ATOM	1174	N	ILE	A	544	5.619	28.080	81.245	1.00	24.40		N
ANISOU	1174	N	ILE	A	544	2987	2720	3564	-110	26	0	N
ATOM	1175	CA	ILE	A	544	6.597	27.158	80.714	1.00	23.25		C
ANISOU	1175	CA	ILE	A	544	2809	2822	3203	-109	-13	83	C
ATOM	1176	C	ILE	A	544	6.320	25.756	81.267	1.00	21.89		C
ANISOU	1176	C	ILE	A	544	2410	2778	3129	-13	80	44	C
ATOM	1177	O	ILE	A	544	6.329	24.846	80.452	1.00	22.55		O
ANISOU	1177	O	ILE	A	544	2457	2733	3378	-308	59	30	O
ATOM	1178	CB	ILE	A	544	8.035	27.606	81.064	1.00	23.69		C
ANISOU	1178	CB	ILE	A	544	2751	2967	3281	-29	41	77	C
ATOM	1179	CG1	ILE	A	544	8.336	28.899	80.280	1.00	24.17		C
ANISOU	1179	CG1	ILE	A	544	2814	2955	3412	-190	-99	71	C
ATOM	1180	CG2	ILE	A	544	9.080	26.559	80.732	1.00	23.76		C
ANISOU	1180	CG2	ILE	A	544	2973	2883	3173	0	-53	-30	C
ATOM	1181	CD1	ILE	A	544	9.606	29.597	80.759	1.00	24.04		C
ANISOU	1181	CD1	ILE	A	544	2749	2965	3420	-194	53	92	C
ATOM	1182	N	LEU	A	545	6.202	25.602	82.589	1.00	23.24		N
ANISOU	1182	N	LEU	A	545	2815	2786	3229	-90	47	105	N
ATOM	1183	CA	LEU	A	545	5.971	24.239	83.093	1.00	22.70		C
ANISOU	1183	CA	LEU	A	545	2755	2763	3107	83	147	97	C
ATOM	1184	C	LEU	A	545	4.719	23.633	82.517	1.00	23.03		C
ANISOU	1184	C	LEU	A	545	2696	2820	3235	55	137	38	C
ATOM	1185	O	LEU	A	545	4.740	22.456	82.099	1.00	22.91		O
ANISOU	1185	O	LEU	A	545	2514	2725	3464	-50	277	67	O
ATOM	1186	CB	LEU	A	545	5.975	24.256	84.626	1.00	23.22		C
ANISOU	1186	CB	LEU	A	545	2832	2865	3127	17	-2	-49	C
ATOM	1187	CG	LEU	A	545	7.316	24.654	85.247	1.00	23.44		C
ANISOU	1187	CG	LEU	A	545	2968	2825	3114	-155	27	-19	C
ATOM	1188	CD1	LEU	A	545	7.091	25.039	86.694	1.00	25.32		C
ANISOU	1188	CD1	LEU	A	545	3398	3041	3181	-46	89	24	C
ATOM	1189	CD2	LEU	A	545	8.294	23.497	85.144	1.00	23.99		C
ANISOU	1189	CD2	LEU	A	545	3040	2933	3144	-124	71	-113	C
ATOM	1190	N	THR	A	546	3.585	24.400	82.423	1.00	23.28		N
ANISOU	1190	N	THR	A	546	2713	2810	3322	57	151	281	N
ATOM	1191	CA	THR	A	546	2.410	23.752	81.835	1.00	23.36		C
ANISOU	1191	CA	THR	A	546	2805	2868	3203	107	153	104	C
ATOM	1192	C	THR	A	546	2.547	23.433	80.360	1.00	23.93		C
ANISOU	1192	C	THR	A	546	2851	2892	3350	101	219	74	C
ATOM	1193	O	THR	A	546	2.063	22.396	79.881	1.00	25.26		O
ANISOU	1193	O	THR	A	546	2518	3265	3816	-11	308	-239	O
ATOM	1194	CB	THR	A	546	1.134	24.602	82.122	1.00	23.80		C
ANISOU	1194	CB	THR	A	546	2923	2874	3245	272	152	110	C

ATOM	1195	OG1	THR	A	546	1.275	25.892	81.529	1.00	25.40		O
ANISOU	1195	OG1	THR	A	546	3111	3131	3409	81	287	289	O
ATOM	1196	CG2	THR	A	546	1.013	24.808	83.628	1.00	25.03		C
ANISOU	1196	CG2	THR	A	546	3109	3137	3263	163	215	23	C
ATOM	1197	N	ASP	A	547	3.336	24.193	79.609	1.00	23.36		N
ANISOU	1197	N	ASP	A	547	2731	2860	3284	12	188	24	N
ATOM	1198	CA	ASP	A	547	3.586	23.924	78.212	1.00	22.59		C
ANISOU	1198	CA	ASP	A	547	2640	2728	3216	17	159	71	C
ATOM	1199	C	ASP	A	547	4.348	22.589	78.092	1.00	22.24		C
ANISOU	1199	C	ASP	A	547	2607	2709	3134	-49	194	47	C
ATOM	1200	O	ASP	A	547	3.981	21.843	77.203	1.00	23.03		O
ANISOU	1200	O	ASP	A	547	2636	2636	3479	-243	321	67	O
ATOM	1201	CB	ASP	A	547	4.468	25.026	77.571	1.00	24.02		C
ANISOU	1201	CB	ASP	A	547	2977	2889	3261	-129	98	85	C
ATOM	1202	CG	ASP	A	547	3.654	26.182	77.017	1.00	25.48		C
ANISOU	1202	CG	ASP	A	547	2948	3175	3557	21	12	187	C
ATOM	1203	OD1	ASP	A	547	2.412	26.058	77.030	1.00	27.64		O
ANISOU	1203	OD1	ASP	A	547	3264	3496	3741	-106	-39	263	O
ATOM	1204	OD2	ASP	A	547	4.222	27.221	76.576	1.00	24.33		O
ANISOU	1204	OD2	ASP	A	547	2766	3161	3318	223	132	261	O
ATOM	1205	N	LEU	A	548	5.324	22.377	78.963	1.00	22.87		N
ANISOU	1205	N	LEU	A	548	2872	2491	3328	-61	256	47	N
ATOM	1206	CA	LEU	A	548	6.120	21.147	78.866	1.00	21.74		C
ANISOU	1206	CA	LEU	A	548	2446	2575	3240	-37	117	130	C
ATOM	1207	C	LEU	A	548	5.230	19.963	79.288	1.00	22.05		C
ANISOU	1207	C	LEU	A	548	2709	2620	3048	-161	154	51	C
ATOM	1208	O	LEU	A	548	5.381	18.895	78.712	1.00	20.79		O
ANISOU	1208	O	LEU	A	548	2505	2472	2922	-377	267	123	O
ATOM	1209	CB	LEU	A	548	7.401	21.241	79.689	1.00	22.72		C
ANISOU	1209	CB	LEU	A	548	2922	2632	3081	-84	26	68	C
ATOM	1210	CG	LEU	A	548	8.365	22.349	79.186	1.00	23.16		C
ANISOU	1210	CG	LEU	A	548	2879	2809	3111	-138	77	100	C
ATOM	1211	CD1	LEU	A	548	9.459	22.500	80.226	1.00	23.26		C
ANISOU	1211	CD1	LEU	A	548	2610	3008	3220	-185	57	106	C
ATOM	1212	CD2	LEU	A	548	8.905	21.969	77.810	1.00	23.43		C
ANISOU	1212	CD2	LEU	A	548	2988	2840	3076	-75	94	160	C
ATOM	1213	N	Gln	A	549	4.357	20.172	80.279	1.00	22.85		N
ANISOU	1213	N	Gln	A	549	2718	2776	3187	-245	176	-77	N
ATOM	1214	CA	Gln	A	549	3.462	19.079	80.712	1.00	24.15		C
ANISOU	1214	CA	Gln	A	549	2874	2976	3324	-284	269	74	C
ATOM	1215	C	Gln	A	549	2.494	18.733	79.598	1.00	24.61		C
ANISOU	1215	C	Gln	A	549	3038	3071	3241	-118	217	51	C
ATOM	1216	O	Gln	A	549	2.283	17.554	79.279	1.00	24.12		O
ANISOU	1216	O	Gln	A	549	2527	3132	3508	-389	233	175	O
ATOM	1217	CB	Gln	A	549	2.712	19.459	82.007	1.00	25.04		C
ANISOU	1217	CB	Gln	A	549	2996	3091	3425	-259	296	-52	C
ATOM	1218	CG	Gln	A	549	1.749	18.311	82.410	1.00	26.70		C
ANISOU	1218	CG	Gln	A	549	3371	3092	3684	-292	275	64	C
ATOM	1219	CD	Gln	A	549	1.112	18.676	83.738	1.00	28.24		C
ANISOU	1219	CD	Gln	A	549	3323	3531	3875	-84	361	61	C
ATOM	1220	OE1	Gln	A	549	0.731	19.849	83.875	1.00	28.70		O
ANISOU	1220	OE1	Gln	A	549	3378	3418	4109	-194	636	61	O
ATOM	1221	NE2	Gln	A	549	1.067	17.723	84.652	1.00	28.03		N
ANISOU	1221	NE2	Gln	A	549	3248	3564	3836	-151	289	70	N
ATOM	1222	N	Lys	A	550	2.023	19.773	78.896	1.00	25.30		N
ANISOU	1222	N	Lys	A	550	2979	3168	3468	-90	108	139	N
ATOM	1223	CA	Lys	A	550	1.165	19.575	77.740	1.00	25.70		C
ANISOU	1223	CA	Lys	A	550	3203	3128	3434	-228	126	145	C
ATOM	1224	C	Lys	A	550	1.855	18.767	76.673	1.00	24.53		C
ANISOU	1224	C	Lys	A	550	2856	3036	3429	-262	78	152	C
ATOM	1225	O	Lys	A	550	1.333	17.855	76.045	1.00	23.16		O
ANISOU	1225	O	Lys	A	550	2326	2988	3486	-472	81	361	O
ATOM	1226	CB	Lys	A	550	0.712	20.937	77.181	1.00	28.22		C
ANISOU	1226	CB	Lys	A	550	3592	3329	3799	-16	-29	166	C

ATOM	1227	CG	LYS	A	550	-0.155	20.713	75.941	1.00	31.76		C
ANISOU	1227	CG	LYS	A	550	4057	4034	3977	-202	-152	-12	C
ATOM	1228	CD	LYS	A	550	-0.798	22.002	75.495	1.00	34.48		C
ANISOU	1228	CD	LYS	A	550	4395	4240	4465	-27	-84	67	C
ATOM	1229	CE	LYS	A	550	0.218	23.051	75.036	1.00	36.00		C
ANISOU	1229	CE	LYS	A	550	4448	4437	4793	-124	-73	91	C
ATOM	1230	NZ	LYS	A	550	-0.506	24.249	74.503	1.00	36.21		N
ANISOU	1230	NZ	LYS	A	550	4398	4531	4830	-109	-120	125	N
ATOM	1231	N	TYR	A	551	3.145	19.062	76.396	1.00	22.08		N
ANISOU	1231	N	TYR	A	551	2503	2664	3225	-274	86	195	N
ATOM	1232	CA	TYR	A	551	3.909	18.345	75.403	1.00	20.84		C
ANISOU	1232	CA	TYR	A	551	2400	2545	2972	-330	-107	215	C
ATOM	1233	C	TYR	A	551	3.939	16.846	75.739	1.00	22.16		C
ANISOU	1233	C	TYR	A	551	2678	2630	3111	-121	-82	136	C
ATOM	1234	O	TYR	A	551	3.842	16.000	74.871	1.00	23.19		O
ANISOU	1234	O	TYR	A	551	2812	2901	3100	-254	-184	114	O
ATOM	1235	CB	TYR	A	551	5.375	18.882	75.293	1.00	19.68		C
ANISOU	1235	CB	TYR	A	551	2346	2340	2791	-357	-31	87	C
ATOM	1236	CG	TYR	A	551	6.163	18.079	74.261	1.00	19.76		C
ANISOU	1236	CG	TYR	A	551	2121	2480	2908	-346	16	116	C
ATOM	1237	CD1	TYR	A	551	5.966	18.245	72.892	1.00	19.83		C
ANISOU	1237	CD1	TYR	A	551	2216	2489	2828	-431	36	-34	C
ATOM	1238	CD2	TYR	A	551	7.059	17.110	74.685	1.00	20.99		C
ANISOU	1238	CD2	TYR	A	551	2399	2410	3165	-388	45	41	C
ATOM	1239	CE1	TYR	A	551	6.647	17.464	71.979	1.00	19.92		C
ANISOU	1239	CE1	TYR	A	551	2278	2447	2845	-361	-42	-31	C
ATOM	1240	CE2	TYR	A	551	7.770	16.333	73.799	1.00	19.81		C
ANISOU	1240	CE2	TYR	A	551	2230	2390	2907	-358	-83	-65	C
ATOM	1241	CZ	TYR	A	551	7.554	16.512	72.449	1.00	20.68		C
ANISOU	1241	CZ	TYR	A	551	2485	2446	2925	-321	-18	79	C
ATOM	1242	OH	TYR	A	551	8.268	15.769	71.555	1.00	21.83		O
ANISOU	1242	OH	TYR	A	551	2357	2564	3373	-132	-156	-63	O
ATOM	1243	N	VAL	A	552	4.265	16.533	76.986	1.00	21.72		N
ANISOU	1243	N	VAL	A	552	2386	2787	3078	-120	-30	180	N
ATOM	1244	CA	VAL	A	552	4.385	15.135	77.406	1.00	22.67		C
ANISOU	1244	CA	VAL	A	552	2549	2802	3262	-149	-13	132	C
ATOM	1245	C	VAL	A	552	3.043	14.392	77.218	1.00	23.51		C
ANISOU	1245	C	VAL	A	552	2671	2936	3325	-258	-5	62	C
ATOM	1246	O	VAL	A	552	3.042	13.279	76.656	1.00	24.33		O
ANISOU	1246	O	VAL	A	552	2665	3018	3563	-221	-92	32	O
ATOM	1247	CB	VAL	A	552	4.835	15.022	78.856	1.00	22.88		C
ANISOU	1247	CB	VAL	A	552	2728	2733	3233	-267	-1	-12	C
ATOM	1248	CG1	VAL	A	552	4.887	13.538	79.270	1.00	23.22		C
ANISOU	1248	CG1	VAL	A	552	2805	2751	3266	-108	-86	143	C
ATOM	1249	CG2	VAL	A	552	6.250	15.553	79.032	1.00	21.76		C
ANISOU	1249	CG2	VAL	A	552	2469	2657	3142	-30	-118	65	C
ATOM	1250	N	MET	A	553	1.989	15.073	77.663	1.00	23.62		N
ANISOU	1250	N	MET	A	553	2690	2877	3407	-202	-72	195	N
ATOM	1251	CA	MET	A	553	0.652	14.423	77.505	1.00	24.68		C
ANISOU	1251	CA	MET	A	553	2803	2951	3624	-329	-27	129	C
ATOM	1252	C	MET	A	553	0.296	14.201	76.061	1.00	26.17		C
ANISOU	1252	C	MET	A	553	3177	3123	3644	-57	-15	61	C
ATOM	1253	O	MET	A	553	-0.177	13.097	75.669	1.00	28.15		O
ANISOU	1253	O	MET	A	553	3440	3305	3950	-389	-109	53	O
ATOM	1254	CB	MET	A	553	-0.353	15.281	78.272	1.00	23.70		C
ANISOU	1254	CB	MET	A	553	2706	2827	3473	-467	-1	177	C
ATOM	1255	CG	MET	A	553	-0.220	15.213	79.787	1.00	26.39		C
ANISOU	1255	CG	MET	A	553	3285	3188	3553	-376	45	88	C
ATOM	1256	SD	MET	A	553	-1.312	16.315	80.696	1.00	29.71		S
ANISOU	1256	SD	MET	A	553	3253	3855	4178	-231	342	92	S
ATOM	1257	CE	MET	A	553	-1.514	17.756	79.686	1.00	31.97		C
ANISOU	1257	CE	MET	A	553	3853	4196	4098	-122	147	142	C
ATOM	1258	N	GLU	A	554	0.511	15.163	75.164	1.00	25.97		N
ANISOU	1258	N	GLU	A	554	2964	3201	3703	-86	4	102	N

ATOM	1259	CA	GLU	A	554	0.181	15.005	73.757	1.00	27.16		C
ANISOU	1259	CA	GLU	A	554	3313	3308	3698	-127	-18	1	C
ATOM	1260	C	GLU	A	554	1.098	14.065	73.003	1.00	26.08		C
ANISOU	1260	C	GLU	A	554	3038	3297	3576	-196	-102	47	C
ATOM	1261	O	GLU	A	554	0.659	13.172	72.252	1.00	26.70		O
ANISOU	1261	O	GLU	A	554	3074	3283	3790	-361	-293	12	O
ATOM	1262	CB	GLU	A	554	0.117	16.374	73.050	1.00	29.34		C
ANISOU	1262	CB	GLU	A	554	3799	3529	3820	-210	-66	159	C
ATOM	1263	CG	GLU	A	554	-0.898	17.308	73.689	1.00	32.77		C
ANISOU	1263	CG	GLU	A	554	4107	4049	4294	11	27	-15	C
ATOM	1264	CD	GLU	A	554	-2.343	16.855	73.550	1.00	35.94		C
ANISOU	1264	CD	GLU	A	554	4309	4585	4762	-137	-26	5	C
ATOM	1265	OE1	GLU	A	554	-2.631	16.312	72.470	1.00	37.57		O
ANISOU	1265	OE1	GLU	A	554	4520	4980	4775	-228	-112	-40	O
ATOM	1266	OE2	GLU	A	554	-3.104	17.042	74.519	1.00	37.27		O
ANISOU	1266	OE2	GLU	A	554	4434	4746	4980	-161	93	15	O
ATOM	1267	N	GLU	A	555	2.411	14.166	73.183	1.00	24.96		N
ANISOU	1267	N	GLU	A	555	2975	3048	3461	-271	-172	78	N
ATOM	1268	CA	GLU	A	555	3.378	13.327	72.502	1.00	24.85		C
ANISOU	1268	CA	GLU	A	555	2759	3221	3463	-315	-182	-14	C
ATOM	1269	C	GLU	A	555	3.218	11.868	72.897	1.00	26.77		C
ANISOU	1269	C	GLU	A	555	3176	3310	3686	-84	-143	59	C
ATOM	1270	O	GLU	A	555	3.437	10.979	72.081	1.00	29.06		O
ANISOU	1270	O	GLU	A	555	3680	3496	3868	-228	-53	-99	O
ATOM	1271	CB	GLU	A	555	4.818	13.829	72.834	1.00	25.12		C
ANISOU	1271	CB	GLU	A	555	2780	3207	3557	-214	-142	-116	C
ATOM	1272	CG	GLU	A	555	5.884	13.047	72.095	1.00	24.32		C
ANISOU	1272	CG	GLU	A	555	2804	3053	3384	-277	-116	-104	C
ATOM	1273	CD	GLU	A	555	5.802	13.180	70.592	1.00	25.45		C
ANISOU	1273	CD	GLU	A	555	3006	3215	3449	-194	-128	-23	C
ATOM	1274	OE1	GLU	A	555	5.283	14.191	70.069	1.00	26.52		O
ANISOU	1274	OE1	GLU	A	555	3194	3175	3709	-237	-137	-15	O
ATOM	1275	OE2	GLU	A	555	6.302	12.257	69.917	1.00	25.01		O
ANISOU	1275	OE2	GLU	A	555	2964	3115	3424	-181	-95	68	O
ATOM	1276	N	SER	A	556	2.807	11.611	74.138	1.00	27.38		N
ANISOU	1276	N	SER	A	556	3426	3272	3706	-160	-58	68	N
ATOM	1277	CA	SER	A	556	2.605	10.236	74.590	1.00	28.32		C
ANISOU	1277	CA	SER	A	556	3570	3307	3884	-260	-158	76	C
ATOM	1278	C	SER	A	556	1.213	9.710	74.262	1.00	29.09		C
ANISOU	1278	C	SER	A	556	3485	3512	4057	-240	-38	34	C
ATOM	1279	O	SER	A	556	0.870	8.642	74.794	1.00	30.33		O
ANISOU	1279	O	SER	A	556	3797	3389	4339	-335	-138	2	O
ATOM	1280	CB	SER	A	556	2.796	10.137	76.107	1.00	27.22		C
ANISOU	1280	CB	SER	A	556	3373	3170	3800	-195	-28	63	C
ATOM	1281	OG	SER	A	556	1.787	10.829	76.803	1.00	26.02		O
ANISOU	1281	OG	SER	A	556	2773	3122	3989	-399	-131	121	O
ATOM	1282	N	LYS	A	557	0.404	10.484	73.579	1.00	30.03		N
ANISOU	1282	N	LYS	A	557	3768	3536	4104	-271	-156	16	N
ATOM	1283	CA	LYS	A	557	-0.977	10.070	73.286	1.00	32.80		C
ANISOU	1283	CA	LYS	A	557	3756	4228	4479	-220	-63	41	C
ATOM	1284	C	LYS	A	557	-1.721	9.825	74.577	1.00	33.23		C
ANISOU	1284	C	LYS	A	557	3980	4202	4442	-136	-55	37	C
ATOM	1285	O	LYS	A	557	-2.440	8.813	74.727	1.00	34.82		O
ANISOU	1285	O	LYS	A	557	4210	4271	4749	-324	-139	-29	O
ATOM	1286	CB	LYS	A	557	-0.924	8.833	72.392	1.00	34.77		C
ANISOU	1286	CB	LYS	A	557	4195	4368	4648	-148	-102	-73	C
ATOM	1287	CG	LYS	A	557	-0.517	9.177	70.965	1.00	38.01		C
ANISOU	1287	CG	LYS	A	557	4704	4951	4787	-114	-3	33	C
ATOM	1288	CD	LYS	A	557	-0.088	7.923	70.218	1.00	40.41		C
ANISOU	1288	CD	LYS	A	557	5065	5095	5196	-3	-16	-90	C
ATOM	1289	CE	LYS	A	557	0.416	8.299	68.825	1.00	42.43		C
ANISOU	1289	CE	LYS	A	557	5443	5425	5252	-33	16	9	C
ATOM	1290	NZ	LYS	A	557	1.635	7.512	68.466	1.00	44.10		N
ANISOU	1290	NZ	LYS	A	557	5512	5671	5574	47	47	-22	N

ATOM	1291	N	HIS	A	558	-1.604	10.765	75.502	1.00	32.60		N
ANISOU	1291	N	HIS	A	558	3743	4183	4463	-187	-75	16	N
ATOM	1292	CA	HIS	A	558	-2.246	10.757	76.800	1.00	33.68		C
ANISOU	1292	CA	HIS	A	558	4072	4242	4482	-99	-14	35	C
ATOM	1293	C	HIS	A	558	-1.999	9.509	77.618	1.00	33.69		C
ANISOU	1293	C	HIS	A	558	4004	4189	4607	-55	5	17	C
ATOM	1294	O	HIS	A	558	-2.929	9.008	78.287	1.00	35.32		O
ANISOU	1294	O	HIS	A	558	4271	4416	4731	-80	201	169	O
ATOM	1295	CB	HIS	A	558	-3.767	11.022	76.623	1.00	35.06		C
ANISOU	1295	CB	HIS	A	558	4096	4524	4702	-69	-45	36	C
ATOM	1296	CG	HIS	A	558	-3.906	12.416	76.059	1.00	36.32		C
ANISOU	1296	CG	HIS	A	558	4365	4626	4807	30	-17	71	C
ATOM	1297	ND1	HIS	A	558	-4.002	12.646	74.705	1.00	37.84		N
ANISOU	1297	ND1	HIS	A	558	4643	4878	4855	33	-26	46	N
ATOM	1298	CD2	HIS	A	558	-3.882	13.615	76.676	1.00	36.40		C
ANISOU	1298	CD2	HIS	A	558	4386	4659	4786	-21	-48	6	C
ATOM	1299	CE1	HIS	A	558	-4.071	13.957	74.501	1.00	37.74		C
ANISOU	1299	CE1	HIS	A	558	4664	4836	4839	-51	26	9	C
ATOM	1300	NE2	HIS	A	558	-4.001	14.557	75.675	1.00	37.69		N
ANISOU	1300	NE2	HIS	A	558	4664	4849	4806	-83	17	46	N
ATOM	1301	N	THR	A	559	-0.775	8.998	77.602	1.00	31.31		N
ANISOU	1301	N	THR	A	559	3768	3728	4399	-297	-91	22	N
ATOM	1302	CA	THR	A	559	-0.446	7.850	78.422	1.00	31.64		C
ANISOU	1302	CA	THR	A	559	3894	3908	4220	-309	-12	118	C
ATOM	1303	C	THR	A	559	0.316	8.269	79.664	1.00	31.07		C
ANISOU	1303	C	THR	A	559	3985	3721	4100	-247	39	160	C
ATOM	1304	O	THR	A	559	0.378	7.551	80.671	1.00	31.04		O
ANISOU	1304	O	THR	A	559	4015	3561	4218	-350	46	222	O
ATOM	1305	CB	THR	A	559	0.341	6.761	77.702	1.00	32.73		C
ANISOU	1305	CB	THR	A	559	4065	4057	4314	-146	-24	73	C
ATOM	1306	OG1	THR	A	559	1.490	7.238	76.996	1.00	32.65		O
ANISOU	1306	OG1	THR	A	559	4065	3911	4432	-285	-45	66	O
ATOM	1307	CG2	THR	A	559	-0.505	6.013	76.659	1.00	32.81		C
ANISOU	1307	CG2	THR	A	559	4071	4159	4235	-215	-79	135	C
ATOM	1308	N	ILE	A	560	1.098	9.370	79.523	1.00	28.80		N
ANISOU	1308	N	ILE	A	560	3655	3444	3845	-136	-90	99	N
ATOM	1309	CA	ILE	A	560	1.937	9.804	80.635	1.00	28.76		C
ANISOU	1309	CA	ILE	A	560	3735	3393	3797	-4	-42	47	C
ATOM	1310	C	ILE	A	560	1.943	11.325	80.725	1.00	27.06		C
ANISOU	1310	C	ILE	A	560	3319	3330	3632	-181	-12	97	C
ATOM	1311	O	ILE	A	560	1.502	12.002	79.780	1.00	25.47		O
ANISOU	1311	O	ILE	A	560	3138	3136	3404	-365	-109	-50	O
ATOM	1312	CB	ILE	A	560	3.402	9.351	80.550	1.00	30.47		C
ANISOU	1312	CB	ILE	A	560	3790	3772	4013	16	16	50	C
ATOM	1313	CG1	ILE	A	560	4.066	9.737	79.235	1.00	30.69		C
ANISOU	1313	CG1	ILE	A	560	3822	3865	3973	21	15	40	C
ATOM	1314	CG2	ILE	A	560	3.567	7.868	80.869	1.00	30.96		C
ANISOU	1314	CG2	ILE	A	560	3886	3731	4145	-19	-16	-20	C
ATOM	1315	CD1	ILE	A	560	5.570	9.465	79.241	1.00	30.76		C
ANISOU	1315	CD1	ILE	A	560	3679	3999	4009	-81	-71	48	C
ATOM	1316	N	GLY	A	561	2.295	11.821	81.907	1.00	26.90		N
ANISOU	1316	N	GLY	A	561	3362	3190	3669	-126	-48	83	N
ATOM	1317	CA	GLY	A	561	2.398	13.268	82.091	1.00	26.89		C
ANISOU	1317	CA	GLY	A	561	3295	3170	3751	-242	-57	141	C
ATOM	1318	C	GLY	A	561	1.403	13.967	82.959	1.00	29.30		C
ANISOU	1318	C	GLY	A	561	3630	3540	3963	-83	22	29	C
ATOM	1319	O	GLY	A	561	1.754	14.916	83.667	1.00	28.44		O
ANISOU	1319	O	GLY	A	561	3166	3646	3994	-347	60	87	O
ATOM	1320	N	GLU	A	562	0.123	13.551	83.033	1.00	31.92		N
ANISOU	1320	N	GLU	A	562	3812	3912	4403	-289	12	88	N
ATOM	1321	CA	GLU	A	562	-0.894	14.265	83.803	1.00	33.43		C
ANISOU	1321	CA	GLU	A	562	4179	4112	4413	-85	83	39	C
ATOM	1322	C	GLU	A	562	-0.685	14.344	85.300	1.00	31.31		C
ANISOU	1322	C	GLU	A	562	3697	3829	4369	-172	73	120	C

ATOM	1323	O	GLU	A	562	-1.151	15.281	85.988	1.00	30.72		O
ANISOU	1323	O	GLU	A	562	3742	3700	4229	-265	131	229	O
ATOM	1324	CB	GLU	A	562	-2.281	13.699	83.422	1.00	38.48		C
ANISOU	1324	CB	GLU	A	562	4420	5013	5189	-158	-73	-61	C
ATOM	1325	CG	GLU	A	562	-2.677	12.442	84.171	1.00	43.17		C
ANISOU	1325	CG	GLU	A	562	5524	5245	5634	-35	53	163	C
ATOM	1326	CD	GLU	A	562	-4.082	11.974	83.808	1.00	46.65		C
ANISOU	1326	CD	GLU	A	562	5690	5941	6094	-89	-65	13	C
ATOM	1327	OE1	GLU	A	562	-4.977	12.830	83.576	1.00	47.41		O
ANISOU	1327	OE1	GLU	A	562	5810	5960	6244	15	-30	-13	O
ATOM	1328	OE2	GLU	A	562	-4.284	10.735	83.751	1.00	49.19		O
ANISOU	1328	OE2	GLU	A	562	6253	6001	6437	-48	-10	42	O
ATOM	1329	N	ASP	A	563	0.084	13.431	85.890	1.00	28.74		N
ANISOU	1329	N	ASP	A	563	3271	3553	4096	-421	112	69	N
ATOM	1330	CA	ASP	A	563	0.382	13.368	87.291	1.00	29.52		C
ANISOU	1330	CA	ASP	A	563	3462	3712	4041	-212	185	74	C
ATOM	1331	C	ASP	A	563	1.820	13.792	87.605	1.00	28.85		C
ANISOU	1331	C	ASP	A	563	3391	3756	3815	-92	68	66	C
ATOM	1332	O	ASP	A	563	2.248	13.622	88.744	1.00	28.02		O
ANISOU	1332	O	ASP	A	563	3147	3722	3775	-141	263	121	O
ATOM	1333	CB	ASP	A	563	0.161	11.936	87.827	1.00	32.05		C
ANISOU	1333	CB	ASP	A	563	4080	3863	4233	-219	158	177	C
ATOM	1334	CG	ASP	A	563	1.014	10.881	87.188	1.00	33.86		C
ANISOU	1334	CG	ASP	A	563	4361	4082	4421	-81	192	79	C
ATOM	1335	OD1	ASP	A	563	1.761	11.179	86.221	1.00	33.79		O
ANISOU	1335	OD1	ASP	A	563	4295	3981	4562	-259	185	232	O
ATOM	1336	OD2	ASP	A	563	0.998	9.670	87.573	1.00	35.37		O
ANISOU	1336	OD2	ASP	A	563	4698	4219	4524	-95	223	297	O
ATOM	1337	N	PHE	A	564	2.504	14.388	86.608	1.00	28.32		N
ANISOU	1337	N	PHE	A	564	3435	3509	3816	-134	30	16	N
ATOM	1338	CA	PHE	A	564	3.869	14.845	86.925	1.00	26.63		C
ANISOU	1338	CA	PHE	A	564	3161	3432	3526	-54	242	103	C
ATOM	1339	C	PHE	A	564	3.870	16.034	87.880	1.00	27.46		C
ANISOU	1339	C	PHE	A	564	3417	3352	3666	-121	181	107	C
ATOM	1340	O	PHE	A	564	2.951	16.876	87.830	1.00	28.83		O
ANISOU	1340	O	PHE	A	564	3359	3570	4023	21	67	168	O
ATOM	1341	CB	PHE	A	564	4.619	15.226	85.635	1.00	25.30		C
ANISOU	1341	CB	PHE	A	564	3155	3120	3337	-60	166	16	C
ATOM	1342	CG	PHE	A	564	5.184	14.097	84.823	1.00	23.86		C
ANISOU	1342	CG	PHE	A	564	2835	2962	3269	-76	81	31	C
ATOM	1343	CD1	PHE	A	564	4.664	12.810	84.786	1.00	25.17		C
ANISOU	1343	CD1	PHE	A	564	3212	2965	3386	-98	89	83	C
ATOM	1344	CD2	PHE	A	564	6.279	14.362	83.997	1.00	24.60		C
ANISOU	1344	CD2	PHE	A	564	3173	3039	3135	-100	89	206	C
ATOM	1345	CE1	PHE	A	564	5.247	11.848	83.996	1.00	24.83		C
ANISOU	1345	CE1	PHE	A	564	3137	3070	3228	-218	54	9	C
ATOM	1346	CE2	PHE	A	564	6.862	13.391	83.236	1.00	25.49		C
ANISOU	1346	CE2	PHE	A	564	3178	3121	3387	-210	130	21	C
ATOM	1347	CZ	PHE	A	564	6.346	12.084	83.205	1.00	25.85		C
ANISOU	1347	CZ	PHE	A	564	3282	3142	3396	-227	72	15	C
ATOM	1348	N	ASP	A	565	4.894	16.155	88.717	1.00	27.01		N
ANISOU	1348	N	ASP	A	565	3369	3467	3428	-112	231	327	N
ATOM	1349	CA	ASP	A	565	5.046	17.272	89.628	1.00	30.49		C
ANISOU	1349	CA	ASP	A	565	3846	3764	3974	-168	262	14	C
ATOM	1350	C	ASP	A	565	5.778	18.401	88.872	1.00	30.83		C
ANISOU	1350	C	ASP	A	565	3881	3829	4005	-90	262	104	C
ATOM	1351	O	ASP	A	565	6.840	18.072	88.319	1.00	31.71		O
ANISOU	1351	O	ASP	A	565	4021	3723	4302	-125	478	1	O
ATOM	1352	CB	ASP	A	565	5.877	16.880	90.853	1.00	34.44		C
ANISOU	1352	CB	ASP	A	565	4294	4408	4386	-13	15	135	C
ATOM	1353	CG	ASP	A	565	5.699	17.779	92.064	1.00	37.62		C
ANISOU	1353	CG	ASP	A	565	4837	4805	4652	-46	71	-62	C
ATOM	1354	OD1	ASP	A	565	4.717	18.577	92.121	1.00	40.24		O
ANISOU	1354	OD1	ASP	A	565	5238	4996	5054	143	156	-92	O

ATOM	1355	OD2	ASP	A	565	6.516	17.728	93.003	1.00	38.63		O
ANISOU	1355	OD2	ASP	A	565	4933	4931	4814	-107	8	-1	O
ATOM	1356	N	LEU	A	566	5.202	19.595	88.854	1.00	29.98		N
ANISOU	1356	N	LEU	A	566	3876	3820	3693	-106	276	60	N
ATOM	1357	CA	LEU	A	566	5.817	20.740	88.179	1.00	30.69		C
ANISOU	1357	CA	LEU	A	566	3846	3857	3959	-155	273	54	C
ATOM	1358	C	LEU	A	566	6.625	21.511	89.207	1.00	31.32		C
ANISOU	1358	C	LEU	A	566	3889	3974	4039	-175	302	-41	C
ATOM	1359	O	LEU	A	566	6.082	21.906	90.256	1.00	31.88		O
ANISOU	1359	O	LEU	A	566	4061	3950	4101	-311	440	-145	O
ATOM	1360	CB	LEU	A	566	4.771	21.619	87.510	1.00	32.50		C
ANISOU	1360	CB	LEU	A	566	4165	4051	4133	-30	140	86	C
ATOM	1361	CG	LEU	A	566	3.753	20.999	86.573	1.00	32.34		C
ANISOU	1361	CG	LEU	A	566	4113	3941	4233	-74	147	37	C
ATOM	1362	CD1	LEU	A	566	2.804	21.979	85.892	1.00	34.10		C
ANISOU	1362	CD1	LEU	A	566	4423	4203	4330	2	96	117	C
ATOM	1363	CD2	LEU	A	566	4.410	20.150	85.495	1.00	33.68		C
ANISOU	1363	CD2	LEU	A	566	4321	4277	4201	-5	160	-15	C
ATOM	1364	N	ILE	A	567	7.932	21.719	88.987	1.00	28.81		N
ANISOU	1364	N	ILE	A	567	3728	3373	3848	-51	290	95	N
ATOM	1365	CA	ILE	A	567	8.763	22.332	90.009	1.00	28.23		C
ANISOU	1365	CA	ILE	A	567	3572	3500	3657	-99	358	153	C
ATOM	1366	C	ILE	A	567	9.680	23.441	89.482	1.00	26.45		C
ANISOU	1366	C	ILE	A	567	3392	3251	3409	-13	152	101	C
ATOM	1367	O	ILE	A	567	10.130	23.274	88.350	1.00	25.65		O
ANISOU	1367	O	ILE	A	567	3337	2913	3496	49	247	121	O
ATOM	1368	CB	ILE	A	567	9.629	21.266	90.701	1.00	30.86		C
ANISOU	1368	CB	ILE	A	567	3950	3828	3949	-20	158	286	C
ATOM	1369	CG1	ILE	A	567	10.558	21.854	91.768	1.00	32.95		C
ANISOU	1369	CG1	ILE	A	567	4180	4044	4296	-87	-11	174	C
ATOM	1370	CG2	ILE	A	567	10.493	20.436	89.775	1.00	33.22		C
ANISOU	1370	CG2	ILE	A	567	4314	4161	4146	40	183	98	C
ATOM	1371	CD1	ILE	A	567	9.803	22.334	92.986	1.00	35.67		C
ANISOU	1371	CD1	ILE	A	567	4647	4518	4388	-50	78	43	C
ATOM	1372	N	HIS	A	568	9.807	24.516	90.224	1.00	24.84		N
ANISOU	1372	N	HIS	A	568	3102	3302	3033	-61	145	208	N
ATOM	1373	CA	HIS	A	568	10.759	25.581	89.879	1.00	25.70		C
ANISOU	1373	CA	HIS	A	568	3155	3457	3152	-146	39	134	C
ATOM	1374	C	HIS	A	568	12.034	25.130	90.629	1.00	26.73		C
ANISOU	1374	C	HIS	A	568	3310	3625	3222	57	66	117	C
ATOM	1375	O	HIS	A	568	12.050	25.213	91.863	1.00	27.81		O
ANISOU	1375	O	HIS	A	568	3427	3972	3166	-24	-6	196	O
ATOM	1376	CB	HIS	A	568	10.274	26.945	90.324	1.00	27.99		C
ANISOU	1376	CB	HIS	A	568	3593	3575	3466	-43	52	27	C
ATOM	1377	CG	HIS	A	568	11.100	28.126	89.865	1.00	31.14		C
ANISOU	1377	CG	HIS	A	568	4036	3871	3925	-196	95	52	C
ATOM	1378	ND1	HIS	A	568	10.560	29.082	89.037	1.00	31.70		N
ANISOU	1378	ND1	HIS	A	568	4013	3873	4159	46	146	11	N
ATOM	1379	CD2	HIS	A	568	12.379	28.514	90.071	1.00	33.15		C
ANISOU	1379	CD2	HIS	A	568	4084	4198	4315	-162	39	39	C
ATOM	1380	CE1	HIS	A	568	11.485	30.007	88.750	1.00	32.74		C
ANISOU	1380	CE1	HIS	A	568	4265	3912	4262	-44	10	-53	C
ATOM	1381	NE2	HIS	A	568	12.590	29.695	89.372	1.00	32.32		N
ANISOU	1381	NE2	HIS	A	568	4113	3897	4272	-26	19	-126	N
ATOM	1382	N	LEU	A	569	12.987	24.543	89.901	1.00	25.62		N
ANISOU	1382	N	LEU	A	569	3271	3325	3140	-43	239	315	N
ATOM	1383	CA	LEU	A	569	14.184	23.990	90.507	1.00	27.08		C
ANISOU	1383	CA	LEU	A	569	3364	3567	3360	-6	133	217	C
ATOM	1384	C	LEU	A	569	15.212	25.016	90.919	1.00	28.36		C
ANISOU	1384	C	LEU	A	569	3513	3742	3521	-60	36	187	C
ATOM	1385	O	LEU	A	569	15.493	25.954	90.149	1.00	29.04		O
ANISOU	1385	O	LEU	A	569	3578	3840	3615	-195	68	312	O
ATOM	1386	CB	LEU	A	569	14.881	23.040	89.496	1.00	28.77		C
ANISOU	1386	CB	LEU	A	569	3662	3640	3628	70	193	103	C

ATOM	1387	CG	LEU	A	569	14.059	21.884	88.940	1.00	31.08		C
ANISOU	1387	CG	LEU	A	569	3961	3909	3940	-25	110	-85	C
ATOM	1388	CD1	LEU	A	569	14.730	21.287	87.700	1.00	30.23		C
ANISOU	1388	CD1	LEU	A	569	3875	3692	3918	-64	86	-16	C
ATOM	1389	CD2	LEU	A	569	13.837	20.810	90.005	1.00	32.36		C
ANISOU	1389	CD2	LEU	A	569	4118	3988	4190	120	86	72	C
ATOM	1390	N	ASP	A	570	15.805	24.873	92.082	1.00	28.26		N
ANISOU	1390	N	ASP	A	570	3498	3877	3362	1	239	274	N
ATOM	1391	CA	ASP	A	570	16.844	25.760	92.553	1.00	29.70		C
ANISOU	1391	CA	ASP	A	570	3647	3905	3733	-38	194	88	C
ATOM	1392	C	ASP	A	570	18.160	25.495	91.825	1.00	26.46		C
ANISOU	1392	C	ASP	A	570	3306	3347	3401	-55	-19	182	C
ATOM	1393	O	ASP	A	570	18.451	24.337	91.609	1.00	25.67		O
ANISOU	1393	O	ASP	A	570	3032	3198	3522	-383	422	424	O
ATOM	1394	CB	ASP	A	570	17.215	25.391	94.013	1.00	34.38		C
ANISOU	1394	CB	ASP	A	570	4400	4612	4052	6	-90	179	C
ATOM	1395	CG	ASP	A	570	16.044	25.734	94.911	1.00	37.90		C
ANISOU	1395	CG	ASP	A	570	4636	5086	4680	44	129	-33	C
ATOM	1396	OD1	ASP	A	570	15.544	26.859	94.700	1.00	40.78		O
ANISOU	1396	OD1	ASP	A	570	5161	5227	5107	130	22	32	O
ATOM	1397	OD2	ASP	A	570	15.736	24.842	95.727	1.00	39.89		O
ANISOU	1397	OD2	ASP	A	570	4875	5415	4867	24	160	151	O
ATOM	1398	N	CYS	A	571	18.994	26.481	91.568	1.00	25.36		N
ANISOU	1398	N	CYS	A	571	3286	3138	3213	61	32	321	N
ATOM	1399	CA	CYS	A	571	20.318	26.223	91.010	1.00	23.70		C
ANISOU	1399	CA	CYS	A	571	3352	2818	2836	49	91	50	C
ATOM	1400	C	CYS	A	571	21.241	27.380	91.342	1.00	23.46		C
ANISOU	1400	C	CYS	A	571	3208	2812	2892	28	171	138	C
ATOM	1401	O	CYS	A	571	20.748	28.429	91.748	1.00	23.13		O
ANISOU	1401	O	CYS	A	571	3183	2724	2883	-24	310	220	O
ATOM	1402	CB	CYS	A	571	20.278	25.968	89.475	1.00	22.21		C
ANISOU	1402	CB	CYS	A	571	3231	2509	2699	171	148	210	C
ATOM	1403	SG	CYS	A	571	20.045	27.501	88.538	1.00	21.88		S
ANISOU	1403	SG	CYS	A	571	3662	2459	2192	96	372	113	S
ATOM	1404	N	PRO	A	572	22.548	27.222	91.217	1.00	24.54		N
ANISOU	1404	N	PRO	A	572	3200	2947	3176	7	178	40	N
ATOM	1405	CA	PRO	A	572	23.518	28.285	91.440	1.00	24.11		C
ANISOU	1405	CA	PRO	A	572	3218	2836	3106	56	174	81	C
ATOM	1406	C	PRO	A	572	23.171	29.463	90.534	1.00	23.17		C
ANISOU	1406	C	PRO	A	572	3137	2779	2886	-51	148	16	C
ATOM	1407	O	PRO	A	572	22.841	29.259	89.382	1.00	22.63		O
ANISOU	1407	O	PRO	A	572	3190	2682	2727	-133	307	149	O
ATOM	1408	CB	PRO	A	572	24.876	27.683	91.122	1.00	25.09		C
ANISOU	1408	CB	PRO	A	572	3137	3059	3335	79	110	88	C
ATOM	1409	CG	PRO	A	572	24.643	26.190	91.232	1.00	26.29		C
ANISOU	1409	CG	PRO	A	572	3405	3154	3429	-151	50	17	C
ATOM	1410	CD	PRO	A	572	23.218	25.967	90.760	1.00	24.99		C
ANISOU	1410	CD	PRO	A	572	3202	2978	3315	44	151	87	C
ATOM	1411	N	GLN	A	573	23.191	30.663	91.113	1.00	21.01		N
ANISOU	1411	N	GLN	A	573	3038	2644	2303	-81	295	134	N
ATOM	1412	CA	GLN	A	573	22.731	31.830	90.337	1.00	21.31		C
ANISOU	1412	CA	GLN	A	573	2952	2581	2562	25	191	48	C
ATOM	1413	C	GLN	A	573	23.958	32.538	89.749	1.00	21.12		C
ANISOU	1413	C	GLN	A	573	2861	2722	2442	-37	166	16	C
ATOM	1414	O	GLN	A	573	25.010	32.581	90.392	1.00	22.44		O
ANISOU	1414	O	GLN	A	573	3115	2770	2641	-192	111	93	O
ATOM	1415	CB	GLN	A	573	22.020	32.789	91.312	1.00	21.04		C
ANISOU	1415	CB	GLN	A	573	2833	2769	2391	-95	130	-104	C
ATOM	1416	CG	GLN	A	573	20.721	32.169	91.876	1.00	21.77		C
ANISOU	1416	CG	GLN	A	573	2805	2889	2578	26	239	-49	C
ATOM	1417	CD	GLN	A	573	19.661	31.965	90.827	1.00	23.08		C
ANISOU	1417	CD	GLN	A	573	3171	2986	2614	-15	180	-41	C
ATOM	1418	OE1	GLN	A	573	19.046	32.951	90.356	1.00	23.03		O
ANISOU	1418	OE1	GLN	A	573	3086	3003	2660	125	314	-10	O

2025.04.14 14:44:00

ATOM	1419	NE2	GLN	A	573	19.416	30.727	90.379	1.00	22.52		N
ANISOU	1419	NE2	GLN	A	573	3255	2844	2459	55	306	49	N
ATOM	1420	N	GLN	A	574	23.812	33.038	88.526	1.00	20.37		N
ANISOU	1420	N	GLN	A	574	2923	2289	2526	-162	125	126	N
ATOM	1421	CA	GLN	A	574	24.967	33.723	87.887	1.00	21.00		C
ANISOU	1421	CA	GLN	A	574	2788	2536	2655	-225	48	-26	C
ATOM	1422	C	GLN	A	574	25.221	35.048	88.588	1.00	21.03		C
ANISOU	1422	C	GLN	A	574	2803	2462	2728	-96	115	-40	C
ATOM	1423	O	GLN	A	574	24.270	35.792	88.897	1.00	20.78		O
ANISOU	1423	O	GLN	A	574	2756	2377	2764	-203	51	-265	O
ATOM	1424	CB	GLN	A	574	24.584	33.888	86.406	1.00	21.23		C
ANISOU	1424	CB	GLN	A	574	2863	2623	2581	-24	279	155	C
ATOM	1425	CG	GLN	A	574	23.446	34.893	86.183	1.00	22.92		C
ANISOU	1425	CG	GLN	A	574	3015	2804	2888	-35	38	62	C
ATOM	1426	CD	GLN	A	574	22.949	34.783	84.758	1.00	23.64		C
ANISOU	1426	CD	GLN	A	574	3062	3021	2900	-95	34	91	C
ATOM	1427	OE1	GLN	A	574	22.371	33.774	84.366	1.00	23.51		O
ANISOU	1427	OE1	GLN	A	574	3291	2898	2742	-59	107	119	O
ATOM	1428	NE2	GLN	A	574	23.236	35.797	83.948	1.00	24.35		N
ANISOU	1428	NE2	GLN	A	574	3349	2886	3017	-177	-65	102	N
ATOM	1429	N	PRO	A	575	26.489	35.441	88.705	1.00	20.01		N
ANISOU	1429	N	PRO	A	575	2714	2225	2664	-105	42	-50	N
ATOM	1430	CA	PRO	A	575	26.856	36.702	89.356	1.00	21.59		C
ANISOU	1430	CA	PRO	A	575	3074	2403	2727	-130	-50	-53	C
ATOM	1431	C	PRO	A	575	27.025	37.844	88.371	1.00	22.37		C
ANISOU	1431	C	PRO	A	575	3188	2633	2678	-219	69	11	C
ATOM	1432	O	PRO	A	575	27.517	38.919	88.750	1.00	25.00		O
ANISOU	1432	O	PRO	A	575	3881	2758	2858	-423	101	-59	O
ATOM	1433	CB	PRO	A	575	28.211	36.325	89.960	1.00	21.25		C
ANISOU	1433	CB	PRO	A	575	2817	2454	2802	-119	79	-128	C
ATOM	1434	CG	PRO	A	575	28.847	35.492	88.873	1.00	20.60		C
ANISOU	1434	CG	PRO	A	575	2747	2276	2804	-76	88	-36	C
ATOM	1435	CD	PRO	A	575	27.686	34.608	88.385	1.00	21.45		C
ANISOU	1435	CD	PRO	A	575	2591	2479	3080	-64	-82	69	C
ATOM	1436	N	ASN	A	576	26.620	37.623	87.130	1.00	21.02		N
ANISOU	1436	N	ASN	A	576	3061	2327	2598	-112	54	85	N
ATOM	1437	CA	ASN	A	576	26.821	38.599	86.049	1.00	19.66		C
ANISOU	1437	CA	ASN	A	576	2870	2133	2467	-138	-7	-31	C
ATOM	1438	C	ASN	A	576	25.662	38.544	85.081	1.00	19.65		C
ANISOU	1438	C	ASN	A	576	2863	2157	2445	106	84	-20	C
ATOM	1439	O	ASN	A	576	24.758	37.713	85.260	1.00	20.86		O
ANISOU	1439	O	ASN	A	576	2867	2310	2750	-104	72	-9	O
ATOM	1440	CB	ASN	A	576	28.154	38.398	85.322	1.00	19.47		C
ANISOU	1440	CB	ASN	A	576	2697	2189	2512	-95	-112	-51	C
ATOM	1441	CG	ASN	A	576	28.245	36.983	84.730	1.00	20.85		C
ANISOU	1441	CG	ASN	A	576	2773	2331	2817	-49	-169	-107	C
ATOM	1442	OD1	ASN	A	576	27.374	36.665	83.914	1.00	19.46		O
ANISOU	1442	OD1	ASN	A	576	3092	1840	2461	-30	-274	121	O
ATOM	1443	ND2	ASN	A	576	29.208	36.159	85.131	1.00	21.52		N
ANISOU	1443	ND2	ASN	A	576	2989	2195	2993	-122	-90	96	N
ATOM	1444	N	GLY	A	577	25.706	39.455	84.077	1.00	18.58		N
ANISOU	1444	N	GLY	A	577	2819	1935	2307	165	27	-114	N
ATOM	1445	CA	GLY	A	577	24.568	39.415	83.156	1.00	19.56		C
ANISOU	1445	CA	GLY	A	577	2721	2208	2502	302	-5	-106	C
ATOM	1446	C	GLY	A	577	24.797	38.665	81.855	1.00	19.64		C
ANISOU	1446	C	GLY	A	577	2836	2245	2383	48	138	15	C
ATOM	1447	O	GLY	A	577	23.850	38.716	81.066	1.00	22.23		O
ANISOU	1447	O	GLY	A	577	3087	2518	2841	255	-44	27	O
ATOM	1448	N	TYR	A	578	25.878	37.922	81.682	1.00	16.92		N
ANISOU	1448	N	TYR	A	578	2714	1577	2137	-76	165	21	N
ATOM	1449	CA	TYR	A	578	26.145	37.336	80.362	1.00	16.24		C
ANISOU	1449	CA	TYR	A	578	2585	1616	1969	-66	24	85	C
ATOM	1450	C	TYR	A	578	26.284	35.807	80.384	1.00	16.73		C
ANISOU	1450	C	TYR	A	578	2584	1605	2170	22	28	-38	C

2025.04.10 10:54:01

ATOM	1451	O	TYR	A	578	26.277	35.191	79.311	1.00	17.44		O
ANISOU	1451	O	TYR	A	578	2695	1778	2152	-307	-43	-34	O
ATOM	1452	CB	TYR	A	578	27.464	37.881	79.819	1.00	18.05		C
ANISOU	1452	CB	TYR	A	578	2417	1988	2454	-51	-9	200	C
ATOM	1453	CG	TYR	A	578	28.616	37.965	80.797	1.00	17.53		C
ANISOU	1453	CG	TYR	A	578	2369	2120	2173	-157	100	80	C
ATOM	1454	CD1	TYR	A	578	29.377	36.836	81.036	1.00	17.77		C
ANISOU	1454	CD1	TYR	A	578	2327	2085	2339	-193	92	220	C
ATOM	1455	CD2	TYR	A	578	28.955	39.125	81.509	1.00	17.90		C
ANISOU	1455	CD2	TYR	A	578	2503	2039	2258	-265	23	192	C
ATOM	1456	CE1	TYR	A	578	30.460	36.820	81.913	1.00	18.18		C
ANISOU	1456	CE1	TYR	A	578	2563	2145	2199	-269	-51	201	C
ATOM	1457	CE2	TYR	A	578	30.000	39.140	82.409	1.00	18.63		C
ANISOU	1457	CE2	TYR	A	578	2506	2192	2381	-171	-48	211	C
ATOM	1458	CZ	TYR	A	578	30.767	38.002	82.588	1.00	19.75		C
ANISOU	1458	CZ	TYR	A	578	2728	2199	2576	-85	-60	26	C
ATOM	1459	OH	TYR	A	578	31.839	38.006	83.459	1.00	20.94		O
ANISOU	1459	OH	TYR	A	578	3103	2377	2475	-225	-188	383	O
ATOM	1460	N	ASP	A	579	26.364	35.218	81.553	1.00	16.24		N
ANISOU	1460	N	ASP	A	579	2383	1562	2224	-32	-128	-93	N
ATOM	1461	CA	ASP	A	579	26.597	33.756	81.601	1.00	15.40		C
ANISOU	1461	CA	ASP	A	579	2375	1479	1997	-149	-153	31	C
ATOM	1462	C	ASP	A	579	25.363	32.895	81.521	1.00	15.59		C
ANISOU	1462	C	ASP	A	579	2026	1757	2142	-1	35	9	C
ATOM	1463	O	ASP	A	579	25.522	31.662	81.674	1.00	16.28		O
ANISOU	1463	O	ASP	A	579	2433	1646	2108	-37	199	9	O
ATOM	1464	CB	ASP	A	579	27.393	33.402	82.866	1.00	16.76		C
ANISOU	1464	CB	ASP	A	579	2320	1856	2192	-222	-213	171	C
ATOM	1465	CG	ASP	A	579	28.892	33.467	82.657	1.00	18.53		C
ANISOU	1465	CG	ASP	A	579	2559	2127	2355	55	-69	56	C
ATOM	1466	OD1	ASP	A	579	29.395	33.366	81.509	1.00	18.83		O
ANISOU	1466	OD1	ASP	A	579	2163	2493	2500	-31	-71	125	O
ATOM	1467	OD2	ASP	A	579	29.610	33.626	83.673	1.00	20.44		O
ANISOU	1467	OD2	ASP	A	579	2765	2218	2782	59	-321	171	O
ATOM	1468	N	CYS	A	580	24.182	33.463	81.341	1.00	14.58		N
ANISOU	1468	N	CYS	A	580	1786	1749	2004	-121	-45	4	N
ATOM	1469	CA	CYS	A	580	22.970	32.593	81.394	1.00	14.75		C
ANISOU	1469	CA	CYS	A	580	1887	1776	1941	-146	73	49	C
ATOM	1470	C	CYS	A	580	23.109	31.389	80.475	1.00	15.30		C
ANISOU	1470	C	CYS	A	580	2005	1882	1927	-119	-34	50	C
ATOM	1471	O	CYS	A	580	22.645	30.293	80.890	1.00	15.92		O
ANISOU	1471	O	CYS	A	580	2281	1646	2122	-91	156	-60	O
ATOM	1472	CB	CYS	A	580	21.662	33.321	81.112	1.00	16.92		C
ANISOU	1472	CB	CYS	A	580	2430	2088	1910	101	33	49	C
ATOM	1473	SG	CYS	A	580	21.746	34.182	79.490	1.00	15.01		S
ANISOU	1473	SG	CYS	A	580	2141	1455	2108	50	101	14	S
ATOM	1474	N	GLY	A	581	23.559	31.538	79.246	1.00	15.26		N
ANISOU	1474	N	GLY	A	581	2113	1666	2021	44	147	-83	N
ATOM	1475	CA	GLY	A	581	23.611	30.365	78.313	1.00	15.15		C
ANISOU	1475	CA	GLY	A	581	2305	1638	1815	-29	-224	-2	C
ATOM	1476	C	GLY	A	581	24.626	29.341	78.879	1.00	12.80		C
ANISOU	1476	C	GLY	A	581	1518	1669	1677	-133	135	98	C
ATOM	1477	O	GLY	A	581	24.369	28.115	78.689	1.00	16.14		O
ANISOU	1477	O	GLY	A	581	2411	1526	2194	74	128	65	O
ATOM	1478	N	ILE	A	582	25.694	29.752	79.489	1.00	13.89		N
ANISOU	1478	N	ILE	A	582	2309	1315	1655	145	100	105	N
ATOM	1479	CA	ILE	A	582	26.664	28.816	80.097	1.00	11.67		C
ANISOU	1479	CA	ILE	A	582	942	1769	1723	2	25	110	C
ATOM	1480	C	ILE	A	582	25.980	28.097	81.274	1.00	14.76		C
ANISOU	1480	C	ILE	A	582	2254	1734	1621	235	-19	111	C
ATOM	1481	O	ILE	A	582	26.205	26.886	81.440	1.00	16.85		O
ANISOU	1481	O	ILE	A	582	2551	1737	2117	-13	-5	89	O
ATOM	1482	CB	ILE	A	582	27.966	29.614	80.495	1.00	14.03		C
ANISOU	1482	CB	ILE	A	582	2097	1580	1655	-29	-270	186	C

2025.04.04 10:34:04

ATOM	1483	CG1	ILE	A	582	28.659	29.974	79.220	1.00	15.12		C
ANISOU	1483	CG1	ILE	A	582	1710	1814	2222	98	161	-32	C
ATOM	1484	CG2	ILE	A	582	28.785	28.740	81.423	1.00	14.20		C
ANISOU	1484	CG2	ILE	A	582	1517	1940	1938	-94	-207	270	C
ATOM	1485	CD1	ILE	A	582	29.291	28.852	78.392	1.00	17.25		C
ANISOU	1485	CD1	ILE	A	582	2564	2012	1976	-73	221	-182	C
ATOM	1486	N	TYR	A	583	25.198	28.807	82.100	1.00	14.54		N
ANISOU	1486	N	TYR	A	583	1670	1839	2016	-52	192	33	N
ATOM	1487	CA	TYR	A	583	24.513	28.141	83.214	1.00	15.88		C
ANISOU	1487	CA	TYR	A	583	2282	1866	1886	99	44	89	C
ATOM	1488	C	TYR	A	583	23.505	27.151	82.647	1.00	14.88		C
ANISOU	1488	C	TYR	A	583	1675	1970	2011	-51	-43	77	C
ATOM	1489	O	TYR	A	583	23.331	26.047	83.234	1.00	16.28		O
ANISOU	1489	O	TYR	A	583	2221	1849	2117	32	106	9	O
ATOM	1490	CB	TYR	A	583	23.892	29.165	84.154	1.00	15.73		C
ANISOU	1490	CB	TYR	A	583	2254	1807	1916	0	-54	-20	C
ATOM	1491	CG	TYR	A	583	24.884	29.693	85.160	1.00	16.77		C
ANISOU	1491	CG	TYR	A	583	1988	2161	2224	-35	-82	32	C
ATOM	1492	CD1	TYR	A	583	25.956	30.477	84.772	1.00	16.09		C
ANISOU	1492	CD1	TYR	A	583	2224	1720	2170	14	13	-41	C
ATOM	1493	CD2	TYR	A	583	24.758	29.358	86.520	1.00	17.99		C
ANISOU	1493	CD2	TYR	A	583	2333	2237	2264	-19	21	83	C
ATOM	1494	CE1	TYR	A	583	26.870	30.952	85.725	1.00	16.44		C
ANISOU	1494	CE1	TYR	A	583	2273	1814	2159	0	-103	65	C
ATOM	1495	CE2	TYR	A	583	25.676	29.799	87.454	1.00	19.12		C
ANISOU	1495	CE2	TYR	A	583	2700	2169	2395	-77	-3	48	C
ATOM	1496	CZ	TYR	A	583	26.715	30.622	87.051	1.00	18.47		C
ANISOU	1496	CZ	TYR	A	583	2359	2362	2296	-46	19	34	C
ATOM	1497	OH	TYR	A	583	27.676	31.089	87.931	1.00	19.08		O
ANISOU	1497	OH	TYR	A	583	2802	2068	2378	-85	-99	-10	O
ATOM	1498	N	VAL	A	584	22.856	27.430	81.524	1.00	14.35		N
ANISOU	1498	N	VAL	A	584	2297	1448	1706	-6	40	26	N
ATOM	1499	CA	VAL	A	584	21.917	26.471	80.896	1.00	13.49		C
ANISOU	1499	CA	VAL	A	584	1239	1687	2199	-25	-198	-53	C
ATOM	1500	C	VAL	A	584	22.739	25.200	80.575	1.00	15.85		C
ANISOU	1500	C	VAL	A	584	2076	1654	2293	-75	84	-156	C
ATOM	1501	O	VAL	A	584	22.297	24.067	80.838	1.00	16.30		O
ANISOU	1501	O	VAL	A	584	2203	1711	2280	38	89	137	O
ATOM	1502	CB	VAL	A	584	21.225	27.070	79.676	1.00	14.64		C
ANISOU	1502	CB	VAL	A	584	2065	1802	1698	148	93	-168	C
ATOM	1503	CG1	VAL	A	584	20.504	25.998	78.788	1.00	16.28		C
ANISOU	1503	CG1	VAL	A	584	2014	1854	2317	-183	-253	-128	C
ATOM	1504	CG2	VAL	A	584	20.116	28.036	80.136	1.00	13.73		C
ANISOU	1504	CG2	VAL	A	584	1648	1723	1846	126	74	24	C
ATOM	1505	N	CYS	A	585	23.890	25.410	79.928	1.00	14.55		N
ANISOU	1505	N	CYS	A	585	1829	1839	1861	149	84	-212	N
ATOM	1506	CA	CYS	A	585	24.745	24.225	79.586	1.00	14.62		C
ANISOU	1506	CA	CYS	A	585	1925	1546	2085	63	68	-103	C
ATOM	1507	C	CYS	A	585	25.196	23.483	80.821	1.00	15.99		C
ANISOU	1507	C	CYS	A	585	2138	1672	2266	166	93	24	C
ATOM	1508	O	CYS	A	585	25.133	22.222	80.860	1.00	15.86		O
ANISOU	1508	O	CYS	A	585	2047	1605	2374	-109	216	-105	O
ATOM	1509	CB	CYS	A	585	25.953	24.692	78.743	1.00	16.25		C
ANISOU	1509	CB	CYS	A	585	2385	1769	2019	-125	137	117	C
ATOM	1510	SG	CYS	A	585	25.410	25.282	77.100	1.00	15.94		S
ANISOU	1510	SG	CYS	A	585	2463	1609	1983	-35	232	134	S
ATOM	1511	N	MET	A	586	25.607	24.149	81.898	1.00	16.65		N
ANISOU	1511	N	MET	A	586	2185	1896	2246	-11	-3	75	N
ATOM	1512	CA	MET	A	586	26.014	23.444	83.132	1.00	16.64		C
ANISOU	1512	CA	MET	A	586	2076	1907	2338	20	-31	109	C
ATOM	1513	C	MET	A	586	24.812	22.720	83.714	1.00	16.83		C
ANISOU	1513	C	MET	A	586	2199	1798	2397	59	87	79	C
ATOM	1514	O	MET	A	586	24.916	21.580	84.199	1.00	16.82		O
ANISOU	1514	O	MET	A	586	2377	1660	2353	80	111	80	O

098534 05.1.01

ATOM	1515	CB	MET	A	586	26.665	24.349	84.176	1.00	17.32		C
ANISOU	1515	CB	MET	A	586	2143	2171	2266	-74	-39	84	C
ATOM	1516	CG	MET	A	586	27.984	24.955	83.586	1.00	17.11		C
ANISOU	1516	CG	MET	A	586	2322	2028	2150	-153	160	-64	C
ATOM	1517	SD	MET	A	586	28.929	25.753	84.903	1.00	17.40		S
ANISOU	1517	SD	MET	A	586	2281	1987	2344	-108	-37	71	S
ATOM	1518	CE	MET	A	586	27.885	27.197	85.107	1.00	18.54		C
ANISOU	1518	CE	MET	A	586	2749	1903	2393	33	-59	113	C
ATOM	1519	N	ASN	A	587	23.624	23.345	83.747	1.00	14.87		N
ANISOU	1519	N	ASN	A	587	1994	1530	2125	-56	81	-73	N
ATOM	1520	CA	ASN	A	587	22.424	22.671	84.251	1.00	16.26		C
ANISOU	1520	CA	ASN	A	587	1976	1864	2337	61	169	49	C
ATOM	1521	C	ASN	A	587	22.050	21.459	83.429	1.00	16.93		C
ANISOU	1521	C	ASN	A	587	2086	1969	2380	-52	-21	53	C
ATOM	1522	O	ASN	A	587	21.545	20.458	84.021	1.00	19.17		O
ANISOU	1522	O	ASN	A	587	2601	1963	2720	-43	137	198	O
ATOM	1523	CB	ASN	A	587	21.243	23.661	84.322	1.00	16.58		C
ANISOU	1523	CB	ASN	A	587	2216	1901	2184	196	62	55	C
ATOM	1524	CG	ASN	A	587	21.249	24.420	85.628	1.00	17.93		C
ANISOU	1524	CG	ASN	A	587	2440	2145	2227	135	83	81	C
ATOM	1525	OD1	ASN	A	587	21.423	23.843	86.692	1.00	18.16		O
ANISOU	1525	OD1	ASN	A	587	2542	2048	2309	197	181	210	O
ATOM	1526	ND2	ASN	A	587	20.952	25.724	85.554	1.00	17.76		N
ANISOU	1526	ND2	ASN	A	587	2369	2019	2361	122	345	2	N
ATOM	1527	N	THR	A	588	22.316	21.472	82.133	1.00	17.13		N
ANISOU	1527	N	THR	A	588	2480	1643	2386	9	28	9	N
ATOM	1528	CA	THR	A	588	22.011	20.287	81.285	1.00	16.51		C
ANISOU	1528	CA	THR	A	588	2153	1685	2436	-35	35	30	C
ATOM	1529	C	THR	A	588	23.054	19.219	81.598	1.00	17.11		C
ANISOU	1529	C	THR	A	588	2223	1914	2365	-6	-188	54	C
ATOM	1530	O	THR	A	588	22.697	18.035	81.711	1.00	18.81		O
ANISOU	1530	O	THR	A	588	2513	1878	2755	-142	75	40	O
ATOM	1531	CB	THR	A	588	22.026	20.673	79.818	1.00	17.47		C
ANISOU	1531	CB	THR	A	588	2187	2155	2297	172	-2	-123	C
ATOM	1532	OG1	THR	A	588	21.090	21.795	79.642	1.00	16.25		O
ANISOU	1532	OG1	THR	A	588	2279	1995	1900	185	19	146	O
ATOM	1533	CG2	THR	A	588	21.626	19.570	78.851	1.00	18.62		C
ANISOU	1533	CG2	THR	A	588	2485	2105	2483	206	-10	-123	C
ATOM	1534	N	LEU	A	589	24.324	19.627	81.659	1.00	17.02		N
ANISOU	1534	N	LEU	A	589	2103	1940	2424	138	30	66	N
ATOM	1535	CA	LEU	A	589	25.396	18.656	81.965	1.00	16.26		C
ANISOU	1535	CA	LEU	A	589	2115	1733	2330	29	-46	29	C
ATOM	1536	C	LEU	A	589	25.164	17.998	83.308	1.00	17.93		C
ANISOU	1536	C	LEU	A	589	2438	2010	2363	16	-91	52	C
ATOM	1537	O	LEU	A	589	25.126	16.737	83.381	1.00	19.00		O
ANISOU	1537	O	LEU	A	589	2729	1916	2573	93	-51	47	O
ATOM	1538	CB	LEU	A	589	26.732	19.403	81.963	1.00	17.41		C
ANISOU	1538	CB	LEU	A	589	2107	2050	2457	36	-46	3	C
ATOM	1539	CG	LEU	A	589	27.962	18.670	82.523	1.00	17.90		C
ANISOU	1539	CG	LEU	A	589	2019	2230	2553	108	64	-41	C
ATOM	1540	CD1	LEU	A	589	28.251	17.540	81.558	1.00	20.93		C
ANISOU	1540	CD1	LEU	A	589	2940	2349	2665	92	-74	-147	C
ATOM	1541	CD2	LEU	A	589	29.115	19.669	82.572	1.00	19.00		C
ANISOU	1541	CD2	LEU	A	589	2119	2499	2600	-83	24	4	C
ATOM	1542	N	TYR	A	590	24.943	18.746	84.356	1.00	17.57		N
ANISOU	1542	N	TYR	A	590	2164	2120	2393	-8	-66	-6	N
ATOM	1543	CA	TYR	A	590	24.757	18.186	85.696	1.00	19.35		C
ANISOU	1543	CA	TYR	A	590	2457	2321	2573	-163	88	69	C
ATOM	1544	C	TYR	A	590	23.427	17.447	85.756	1.00	19.84		C
ANISOU	1544	C	TYR	A	590	2584	2248	2707	-36	-78	68	C
ATOM	1545	O	TYR	A	590	23.429	16.355	86.324	1.00	19.99		O
ANISOU	1545	O	TYR	A	590	2457	2270	2868	76	-19	254	O
ATOM	1546	CB	TYR	A	590	24.808	19.275	86.791	1.00	18.47		C
ANISOU	1546	CB	TYR	A	590	2249	2297	2472	-75	74	29	C

ATOM	1547	CG	TYR	A	590	26.243	19.696	87.110	1.00	19.70		C
ANISOU	1547	CG	TYR	A	590	2405	2494	2588	-166	9	41	C
ATOM	1548	CD1	TYR	A	590	27.110	20.315	86.197	1.00	18.32		C
ANISOU	1548	CD1	TYR	A	590	2317	2126	2519	-22	-137	177	C
ATOM	1549	CD2	TYR	A	590	26.736	19.417	88.377	1.00	20.50		C
ANISOU	1549	CD2	TYR	A	590	2611	2448	2730	-165	-113	179	C
ATOM	1550	CE1	TYR	A	590	28.396	20.662	86.579	1.00	20.91		C
ANISOU	1550	CE1	TYR	A	590	2746	2379	2820	3	-108	197	C
ATOM	1551	CE2	TYR	A	590	28.015	19.757	88.767	1.00	22.19		C
ANISOU	1551	CE2	TYR	A	590	2759	2738	2932	-119	-154	162	C
ATOM	1552	CZ	TYR	A	590	28.845	20.365	87.839	1.00	21.25		C
ANISOU	1552	CZ	TYR	A	590	2464	2849	2759	-119	-129	18	C
ATOM	1553	OH	TYR	A	590	30.151	20.716	88.161	1.00	24.98		O
ANISOU	1553	OH	TYR	A	590	2980	3270	3242	-111	-299	61	O
ATOM	1554	N	GLY	A	591	22.369	18.004	85.199	1.00	17.96		N
ANISOU	1554	N	GLY	A	591	2267	2041	2515	-97	-167	82	N
ATOM	1555	CA	GLY	A	591	21.056	17.274	85.231	1.00	19.00		C
ANISOU	1555	CA	GLY	A	591	2291	2242	2685	-41	-13	149	C
ATOM	1556	C	GLY	A	591	21.187	15.972	84.452	1.00	20.19		C
ANISOU	1556	C	GLY	A	591	2656	2328	2687	-117	-83	125	C
ATOM	1557	O	GLY	A	591	20.603	14.978	84.956	1.00	21.39		O
ANISOU	1557	O	GLY	A	591	2711	2305	3112	-15	-123	404	O
ATOM	1558	N	SER	A	592	21.855	15.896	83.318	1.00	19.55		N
ANISOU	1558	N	SER	A	592	2498	2220	2710	-110	-63	22	N
ATOM	1559	CA	SER	A	592	21.994	14.639	82.554	1.00	20.81		C
ANISOU	1559	CA	SER	A	592	2759	2333	2817	13	-20	9	C
ATOM	1560	C	SER	A	592	22.749	13.574	83.332	1.00	22.20		C
ANISOU	1560	C	SER	A	592	2799	2535	3102	47	-126	53	C
ATOM	1561	O	SER	A	592	22.510	12.368	83.101	1.00	25.13		O
ANISOU	1561	O	SER	A	592	3323	2530	3696	-15	-149	128	O
ATOM	1562	CB	SER	A	592	22.702	14.845	81.216	1.00	21.67		C
ANISOU	1562	CB	SER	A	592	2931	2516	2785	90	-47	78	C
ATOM	1563	OG	SER	A	592	24.093	15.104	81.330	1.00	24.49		O
ANISOU	1563	OG	SER	A	592	3197	2506	3603	-64	145	55	O
ATOM	1564	N	ALA	A	593	23.678	14.020	84.183	1.00	21.83		N
ANISOU	1564	N	ALA	A	593	2899	2455	2939	53	-171	177	N
ATOM	1565	CA	ALA	A	593	24.477	13.086	84.997	1.00	21.91		C
ANISOU	1565	CA	ALA	A	593	2652	2553	3121	35	-194	125	C
ATOM	1566	C	ALA	A	593	23.834	12.838	86.339	1.00	22.32		C
ANISOU	1566	C	ALA	A	593	2870	2523	3088	-153	-238	194	C
ATOM	1567	O	ALA	A	593	24.409	12.103	87.194	1.00	23.63		O
ANISOU	1567	O	ALA	A	593	3059	2628	3291	-63	-283	353	O
ATOM	1568	CB	ALA	A	593	25.857	13.747	85.245	1.00	21.21		C
ANISOU	1568	CB	ALA	A	593	2674	2296	3088	-20	-107	20	C
ATOM	1569	N	ASP	A	594	22.661	13.384	86.612	1.00	23.59		N
ANISOU	1569	N	ASP	A	594	3148	2496	3320	-37	-72	219	N
ATOM	1570	CA	ASP	A	594	21.996	13.318	87.887	1.00	24.82		C
ANISOU	1570	CA	ASP	A	594	3161	2833	3436	-159	2	159	C
ATOM	1571	C	ASP	A	594	22.938	13.707	89.016	1.00	25.08		C
ANISOU	1571	C	ASP	A	594	3164	2864	3500	-182	-92	281	C
ATOM	1572	O	ASP	A	594	23.014	13.104	90.075	1.00	26.59		O
ANISOU	1572	O	ASP	A	594	3536	3077	3491	-207	-123	433	O
ATOM	1573	CB	ASP	A	594	21.409	11.909	88.143	1.00	26.02		C
ANISOU	1573	CB	ASP	A	594	3316	2893	3678	-104	28	227	C
ATOM	1574	CG	ASP	A	594	20.158	11.698	87.293	1.00	27.94		C
ANISOU	1574	CG	ASP	A	594	3320	3462	3836	-248	24	205	C
ATOM	1575	OD1	ASP	A	594	19.200	12.497	87.384	1.00	29.49		O
ANISOU	1575	OD1	ASP	A	594	3488	3625	4092	-107	-8	359	O
ATOM	1576	OD2	ASP	A	594	20.100	10.701	86.573	1.00	30.04		O
ANISOU	1576	OD2	ASP	A	594	3527	4103	3786	62	64	-73	O
ATOM	1577	N	ALA	A	595	23.658	14.827	88.873	1.00	23.58		N
ANISOU	1577	N	ALA	A	595	3020	2665	3274	-129	-65	383	N
ATOM	1578	CA	ALA	A	595	24.601	15.336	89.833	1.00	24.45		C
ANISOU	1578	CA	ALA	A	595	3147	2911	3233	-117	-137	381	C

ATOM	1579	C	ALA A 595	24.059	16.537	90.580	1.00	25.46		C
ANISOU	1579	C	ALA A 595	3060	3203	3410	-98	17	165	C
ATOM	1580	O	ALA A 595	23.307	17.328	89.966	1.00	27.24		O
ANISOU	1580	O	ALA A 595	3680	3042	3627	-125	-35	377	O
ATOM	1581	CB	ALA A 595	25.823	15.778	88.991	1.00	23.95		C
ANISOU	1581	CB	ALA A 595	2852	2904	3344	-40	-101	74	C
ATOM	1582	N	PRO A 596	24.375	16.744	91.844	1.00	26.95		N
ANISOU	1582	N	PRO A 596	3555	3310	3376	-124	30	231	N
ATOM	1583	CA	PRO A 596	23.931	17.860	92.645	1.00	27.99		C
ANISOU	1583	CA	PRO A 596	3785	3410	3438	-94	23	227	C
ATOM	1584	C	PRO A 596	24.365	19.165	91.958	1.00	27.48		C
ANISOU	1584	C	PRO A 596	3681	3320	3440	-101	-44	185	C
ATOM	1585	O	PRO A 596	25.433	19.130	91.368	1.00	26.15		O
ANISOU	1585	O	PRO A 596	3607	3060	3269	-96	-133	283	O
ATOM	1586	CB	PRO A 596	24.703	17.704	93.953	1.00	29.33		C
ANISOU	1586	CB	PRO A 596	3911	3724	3508	11	-42	93	C
ATOM	1587	CG	PRO A 596	24.951	16.225	94.025	1.00	29.64		C
ANISOU	1587	CG	PRO A 596	4003	3733	3526	-84	35	123	C
ATOM	1588	CD	PRO A 596	25.295	15.831	92.601	1.00	28.42		C
ANISOU	1588	CD	PRO A 596	3716	3566	3515	14	-69	96	C
ATOM	1589	N	LEU A 597	23.524	20.174	91.973	1.00	27.94		N
ANISOU	1589	N	LEU A 597	3929	3250	3436	-51	33	213	N
ATOM	1590	CA	LEU A 597	23.906	21.420	91.243	1.00	27.38		C
ANISOU	1590	CA	LEU A 597	3727	3383	3295	-79	53	277	C
ATOM	1591	C	LEU A 597	24.791	22.293	92.113	1.00	28.84		C
ANISOU	1591	C	LEU A 597	3977	3446	3536	-157	79	201	C
ATOM	1592	O	LEU A 597	24.268	23.207	92.758	1.00	29.55		O
ANISOU	1592	O	LEU A 597	4210	3436	3584	-201	165	175	O
ATOM	1593	CB	LEU A 597	22.596	22.126	90.814	1.00	25.56		C
ANISOU	1593	CB	LEU A 597	3600	3108	3003	-102	223	184	C
ATOM	1594	CG	LEU A 597	21.613	21.275	90.017	1.00	25.30		C
ANISOU	1594	CG	LEU A 597	3413	3191	3009	42	160	174	C
ATOM	1595	CD1	LEU A 597	20.386	22.064	89.594	1.00	23.99		C
ANISOU	1595	CD1	LEU A 597	3367	2805	2944	-20	230	185	C
ATOM	1596	CD2	LEU A 597	22.207	20.601	88.769	1.00	24.88		C
ANISOU	1596	CD2	LEU A 597	3302	2962	3190	169	113	120	C
ATOM	1597	N	ASP A 598	26.090	21.974	92.163	1.00	29.04		N
ANISOU	1597	N	ASP A 598	3977	3497	3560	-191	14	369	N
ATOM	1598	CA	ASP A 598	26.990	22.694	93.045	1.00	31.19		C
ANISOU	1598	CA	ASP A 598	3988	4002	3862	-191	-48	194	C
ATOM	1599	C	ASP A 598	28.111	23.413	92.290	1.00	29.95		C
ANISOU	1599	C	ASP A 598	3848	3913	3620	-147	-65	214	C
ATOM	1600	O	ASP A 598	29.121	23.819	92.878	1.00	31.27		O
ANISOU	1600	O	ASP A 598	4012	4046	3825	-244	-108	309	O
ATOM	1601	CB	ASP A 598	27.572	21.752	94.100	1.00	32.87		C
ANISOU	1601	CB	ASP A 598	4345	4096	4047	-52	-63	262	C
ATOM	1602	CG	ASP A 598	28.265	20.527	93.570	1.00	35.53		C
ANISOU	1602	CG	ASP A 598	4633	4443	4423	47	15	30	C
ATOM	1603	OD1	ASP A 598	28.549	20.335	92.374	1.00	34.43		O
ANISOU	1603	OD1	ASP A 598	4502	4297	4285	19	-53	249	O
ATOM	1604	OD2	ASP A 598	28.529	19.643	94.444	1.00	37.50		O
ANISOU	1604	OD2	ASP A 598	4992	4669	4588	135	-79	138	O
ATOM	1605	N	PHE A 599	27.917	23.551	90.992	1.00	26.85		N
ANISOU	1605	N	PHE A 599	3225	3441	3536	-271	-83	251	N
ATOM	1606	CA	PHE A 599	28.898	24.313	90.190	1.00	24.83		C
ANISOU	1606	CA	PHE A 599	3098	3226	3109	-128	-149	148	C
ATOM	1607	C	PHE A 599	28.790	25.772	90.612	1.00	25.16		C
ANISOU	1607	C	PHE A 599	3151	3265	3146	-82	-21	159	C
ATOM	1608	O	PHE A 599	27.858	26.255	91.265	1.00	25.44		O
ANISOU	1608	O	PHE A 599	3136	3311	3220	-258	27	124	O
ATOM	1609	CB	PHE A 599	28.581	24.102	88.707	1.00	23.88		C
ANISOU	1609	CB	PHE A 599	3038	2995	3041	-53	54	167	C
ATOM	1610	CG	PHE A 599	27.157	24.337	88.304	1.00	23.04		C
ANISOU	1610	CG	PHE A 599	3002	2703	3048	-134	37	107	C

ATOM	1611	CD1	PHE	A	599	26.700	25.624	88.119	1.00	22.28		C
ANISOU	1611	CD1	PHE	A	599	2986	2648	2832	-161	6	225	C
ATOM	1612	CD2	PHE	A	599	26.248	23.294	88.072	1.00	21.80		C
ANISOU	1612	CD2	PHE	A	599	2787	2692	2805	-102	-18	102	C
ATOM	1613	CE1	PHE	A	599	25.409	25.882	87.742	1.00	22.53		C
ANISOU	1613	CE1	PHE	A	599	2902	2495	3162	-98	48	89	C
ATOM	1614	CE2	PHE	A	599	24.959	23.554	87.677	1.00	21.61		C
ANISOU	1614	CE2	PHE	A	599	2819	2598	2793	17	167	58	C
ATOM	1615	CZ	PHE	A	599	24.500	24.850	87.490	1.00	22.64		C
ANISOU	1615	CZ	PHE	A	599	3010	2566	3024	-119	-25	95	C
ATOM	1616	N	ASP	A	600	29.798	26.540	90.164	1.00	24.19		N
ANISOU	1616	N	ASP	A	600	3133	3051	3009	-160	11	107	N
ATOM	1617	CA	ASP	A	600	29.844	27.974	90.466	1.00	25.05		C
ANISOU	1617	CA	ASP	A	600	3165	3116	3237	-82	89	28	C
ATOM	1618	C	ASP	A	600	30.354	28.804	89.316	1.00	23.68		C
ANISOU	1618	C	ASP	A	600	3167	2819	3013	3	-47	-52	C
ATOM	1619	O	ASP	A	600	30.542	28.313	88.214	1.00	21.71		O
ANISOU	1619	O	ASP	A	600	2866	2354	3030	-112	188	21	O
ATOM	1620	CB	ASP	A	600	30.720	28.231	91.701	1.00	26.96		C
ANISOU	1620	CB	ASP	A	600	3507	3477	3260	-144	-28	64	C
ATOM	1621	CG	ASP	A	600	32.153	27.782	91.458	1.00	29.38		C
ANISOU	1621	CG	ASP	A	600	3562	3804	3796	-31	-28	-17	C
ATOM	1622	OD1	ASP	A	600	32.679	27.806	90.322	1.00	27.07		O
ANISOU	1622	OD1	ASP	A	600	3206	3273	3808	-335	-116	151	O
ATOM	1623	OD2	ASP	A	600	32.835	27.340	92.425	1.00	33.08		O
ANISOU	1623	OD2	ASP	A	600	4285	4283	4001	-63	-211	224	O
ATOM	1624	N	TYR	A	601	30.623	30.104	89.581	1.00	23.00		N
ANISOU	1624	N	TYR	A	601	2881	2784	3074	-181	6	-13	N
ATOM	1625	CA	TYR	A	601	30.998	30.987	88.477	1.00	23.93		C
ANISOU	1625	CA	TYR	A	601	3108	2869	3115	-23	112	4	C
ATOM	1626	C	TYR	A	601	32.373	30.687	87.901	1.00	22.53		C
ANISOU	1626	C	TYR	A	601	2963	2527	3070	-121	-1	-65	C
ATOM	1627	O	TYR	A	601	32.586	31.070	86.749	1.00	22.09		O
ANISOU	1627	O	TYR	A	601	2989	2358	3045	-232	-155	-181	O
ATOM	1628	CB	TYR	A	601	30.915	32.464	88.854	1.00	25.47		C
ANISOU	1628	CB	TYR	A	601	3374	2902	3402	58	169	-11	C
ATOM	1629	CG	TYR	A	601	32.106	32.960	89.642	1.00	27.42		C
ANISOU	1629	CG	TYR	A	601	3456	3295	3669	53	74	-101	C
ATOM	1630	CD1	TYR	A	601	33.002	33.759	88.923	1.00	28.68		C
ANISOU	1630	CD1	TYR	A	601	3624	3501	3772	-29	125	-38	C
ATOM	1631	CD2	TYR	A	601	32.356	32.704	90.971	1.00	27.34		C
ANISOU	1631	CD2	TYR	A	601	3461	3216	3713	-24	49	-77	C
ATOM	1632	CE1	TYR	A	601	34.127	34.265	89.545	1.00	31.22		C
ANISOU	1632	CE1	TYR	A	601	3922	3822	4117	-95	-46	-82	C
ATOM	1633	CE2	TYR	A	601	33.486	33.223	91.622	1.00	30.06		C
ANISOU	1633	CE2	TYR	A	601	3700	3660	4061	-59	-82	-168	C
ATOM	1634	CZ	TYR	A	601	34.345	34.003	90.870	1.00	31.10		C
ANISOU	1634	CZ	TYR	A	601	3948	3810	4059	-102	-12	-80	C
ATOM	1635	OH	TYR	A	601	35.489	34.534	91.430	1.00	34.40		O
ANISOU	1635	OH	TYR	A	601	4128	4249	4695	-335	-50	-160	O
ATOM	1636	N	LYS	A	602	33.235	30.034	88.683	1.00	22.59		N
ANISOU	1636	N	LYS	A	602	2780	2694	3110	-50	15	-34	N
ATOM	1637	CA	LYS	A	602	34.536	29.637	88.115	1.00	23.43		C
ANISOU	1637	CA	LYS	A	602	2910	2822	3171	-66	-34	-87	C
ATOM	1638	C	LYS	A	602	34.320	28.485	87.131	1.00	21.11		C
ANISOU	1638	C	LYS	A	602	2551	2625	2844	-32	-93	124	C
ATOM	1639	O	LYS	A	602	34.974	28.404	86.096	1.00	20.00		O
ANISOU	1639	O	LYS	A	602	2793	2215	2593	-110	-270	161	O
ATOM	1640	CB	LYS	A	602	35.501	29.259	89.238	1.00	25.08		C
ANISOU	1640	CB	LYS	A	602	3216	3205	3108	57	-82	42	C
ATOM	1641	CG	LYS	A	602	35.763	30.422	90.178	1.00	28.29		C
ANISOU	1641	CG	LYS	A	602	3679	3448	3622	-80	-6	-182	C
ATOM	1642	CD	LYS	A	602	36.742	30.059	91.294	1.00	31.15		C
ANISOU	1642	CD	LYS	A	602	3996	3959	3880	6	-124	103	C

ATOM	1643	CE	LYS	A	602	36.820	31.260	92.239	1.00	34.67		C
ANISOU	1643	CE	LYS	A	602	4624	4288	4261	-68	-69	-124	C
ATOM	1644	NZ	LYS	A	602	37.947	31.103	93.200	1.00	36.24		N
ANISOU	1644	NZ	LYS	A	602	4693	4587	4488	-2	-158	-7	N
ATOM	1645	N	ASP	A	603	33.376	27.576	87.467	1.00	21.49		N
ANISOU	1645	N	ASP	A	603	2627	2580	2958	-40	-213	32	N
ATOM	1646	CA	ASP	A	603	33.041	26.540	86.512	1.00	20.70		C
ANISOU	1646	CA	ASP	A	603	2503	2580	2783	-64	-94	64	C
ATOM	1647	C	ASP	A	603	32.507	27.199	85.242	1.00	19.84		C
ANISOU	1647	C	ASP	A	603	2374	2362	2802	-9	-39	58	C
ATOM	1648	O	ASP	A	603	32.747	26.694	84.168	1.00	20.25		O
ANISOU	1648	O	ASP	A	603	2571	2168	2955	22	-34	10	O
ATOM	1649	CB	ASP	A	603	31.939	25.602	87.073	1.00	21.75		C
ANISOU	1649	CB	ASP	A	603	2753	2565	2946	-117	12	58	C
ATOM	1650	CG	ASP	A	603	32.473	24.814	88.259	1.00	24.95		C
ANISOU	1650	CG	ASP	A	603	3244	3090	3146	21	-102	103	C
ATOM	1651	OD1	ASP	A	603	33.504	24.124	88.067	1.00	26.87		O
ANISOU	1651	OD1	ASP	A	603	3238	3253	3718	83	-119	288	O
ATOM	1652	OD2	ASP	A	603	31.931	24.832	89.375	1.00	27.25		O
ANISOU	1652	OD2	ASP	A	603	3427	3575	3351	-29	37	71	O
ATOM	1653	N	ALA	A	604	31.718	28.290	85.353	1.00	19.54		N
ANISOU	1653	N	ALA	A	604	2625	2177	2620	7	-79	4	N
ATOM	1654	CA	ALA	A	604	31.201	28.929	84.157	1.00	19.18		C
ANISOU	1654	CA	ALA	A	604	2317	2340	2631	244	25	23	C
ATOM	1655	C	ALA	A	604	32.294	29.466	83.253	1.00	18.27		C
ANISOU	1655	C	ALA	A	604	2402	2110	2431	113	-28	-5	C
ATOM	1656	O	ALA	A	604	32.274	29.280	82.024	1.00	17.93		O
ANISOU	1656	O	ALA	A	604	2357	2005	2452	9	-136	10	O
ATOM	1657	CB	ALA	A	604	30.227	30.061	84.549	1.00	18.43		C
ANISOU	1657	CB	ALA	A	604	2495	2034	2473	172	217	-85	C
ATOM	1658	N	ILE	A	605	33.357	30.040	83.881	1.00	18.09		N
ANISOU	1658	N	ILE	A	605	2206	2018	2649	84	-200	101	N
ATOM	1659	CA	ILE	A	605	34.524	30.487	83.090	1.00	20.05		C
ANISOU	1659	CA	ILE	A	605	2547	2479	2593	-41	-65	99	C
ATOM	1660	C	ILE	A	605	35.181	29.333	82.349	1.00	20.12		C
ANISOU	1660	C	ILE	A	605	2441	2666	2537	-33	-44	42	C
ATOM	1661	O	ILE	A	605	35.406	29.342	81.123	1.00	19.13		O
ANISOU	1661	O	ILE	A	605	2040	2732	2496	-99	-53	308	O
ATOM	1662	CB	ILE	A	605	35.566	31.179	84.004	1.00	22.12		C
ANISOU	1662	CB	ILE	A	605	2722	2902	2781	-53	-161	-18	C
ATOM	1663	CG1	ILE	A	605	34.967	32.459	84.578	1.00	23.89		C
ANISOU	1663	CG1	ILE	A	605	3070	2951	3055	7	-153	-50	C
ATOM	1664	CG2	ILE	A	605	36.839	31.425	83.206	1.00	22.71		C
ANISOU	1664	CG2	ILE	A	605	2780	2808	3039	-145	-60	34	C
ATOM	1665	CD1	ILE	A	605	35.732	32.980	85.815	1.00	25.66		C
ANISOU	1665	CD1	ILE	A	605	3420	3243	3087	-53	-191	-125	C
ATOM	1666	N	ARG	A	606	35.368	28.196	83.040	1.00	20.12		N
ANISOU	1666	N	ARG	A	606	2448	2560	2637	-79	-51	69	N
ATOM	1667	CA	ARG	A	606	35.949	27.000	82.408	1.00	20.36		C
ANISOU	1667	CA	ARG	A	606	2577	2493	2667	9	-50	121	C
ATOM	1668	C	ARG	A	606	35.010	26.402	81.374	1.00	19.06		C
ANISOU	1668	C	ARG	A	606	2646	2122	2474	113	-19	254	C
ATOM	1669	O	ARG	A	606	35.447	25.822	80.366	1.00	19.14		O
ANISOU	1669	O	ARG	A	606	2476	2306	2493	98	-42	176	O
ATOM	1670	CB	ARG	A	606	36.295	25.912	83.473	1.00	22.72		C
ANISOU	1670	CB	ARG	A	606	2998	2540	3096	272	-55	189	C
ATOM	1671	CG	ARG	A	606	37.308	26.410	84.479	1.00	26.58		C
ANISOU	1671	CG	ARG	A	606	3415	3256	3430	66	-151	11	C
ATOM	1672	CD	ARG	A	606	38.035	25.267	85.256	1.00	31.19		C
ANISOU	1672	CD	ARG	A	606	3774	3958	4120	416	-263	239	C
ATOM	1673	NE	ARG	A	606	38.633	25.996	86.406	1.00	36.26		N
ANISOU	1673	NE	ARG	A	606	4700	4591	4486	44	-222	-63	N
ATOM	1674	CZ	ARG	A	606	38.021	26.191	87.579	1.00	38.29		C
ANISOU	1674	CZ	ARG	A	606	4854	4946	4750	102	8	-24	C

ATOM	1675	NH1	ARG	A	606	36.817	25.729	87.869	1.00	37.81		N
ANISOU	1675	NH1	ARG	A	606	4845	4766	4756	88	-69	72	N
ATOM	1676	NH2	ARG	A	606	38.655	26.909	88.513	1.00	40.36		N
ANISOU	1676	NH2	ARG	A	606	5115	5185	5034	24	-103	-129	N
ATOM	1677	N	MET	A	607	33.698	26.515	81.636	1.00	18.65		N
ANISOU	1677	N	MET	A	607	2407	2017	2662	-87	-177	122	N
ATOM	1678	CA	MET	A	607	32.727	25.913	80.700	1.00	17.45		C
ANISOU	1678	CA	MET	A	607	2118	2046	2467	66	-29	-52	C
ATOM	1679	C	MET	A	607	32.860	26.493	79.316	1.00	17.15		C
ANISOU	1679	C	MET	A	607	2198	1824	2492	20	-17	-29	C
ATOM	1680	O	MET	A	607	32.678	25.805	78.280	1.00	17.55		O
ANISOU	1680	O	MET	A	607	2300	1799	2569	195	-146	14	O
ATOM	1681	CB	MET	A	607	31.296	26.054	81.261	1.00	17.74		C
ANISOU	1681	CB	MET	A	607	2194	2041	2506	17	-12	-50	C
ATOM	1682	CG	MET	A	607	30.294	25.283	80.411	1.00	18.24		C
ANISOU	1682	CG	MET	A	607	2330	1868	2732	14	-22	-86	C
ATOM	1683	SD	MET	A	607	30.433	23.522	80.870	1.00	21.00		S
ANISOU	1683	SD	MET	A	607	2754	1772	3455	20	274	11	S
ATOM	1684	CE	MET	A	607	28.922	22.888	80.130	1.00	23.17		C
ANISOU	1684	CE	MET	A	607	3229	2264	3312	-110	-4	-70	C
ATOM	1685	N	ARG	A	608	33.029	27.838	79.234	1.00	16.78		N
ANISOU	1685	N	ARG	A	608	2217	1769	2391	-179	-19	49	N
ATOM	1686	CA	ARG	A	608	33.181	28.429	77.908	1.00	17.63		C
ANISOU	1686	CA	ARG	A	608	2363	1974	2360	30	30	-43	C
ATOM	1687	C	ARG	A	608	34.321	27.799	77.119	1.00	17.62		C
ANISOU	1687	C	ARG	A	608	2356	1929	2408	-79	-55	61	C
ATOM	1688	O	ARG	A	608	34.190	27.502	75.925	1.00	17.32		O
ANISOU	1688	O	ARG	A	608	2299	1917	2366	252	3	66	O
ATOM	1689	CB	ARG	A	608	33.449	29.942	77.991	1.00	17.88		C
ANISOU	1689	CB	ARG	A	608	2112	2023	2658	-163	54	-138	C
ATOM	1690	CG	ARG	A	608	32.229	30.739	78.460	1.00	18.98		C
ANISOU	1690	CG	ARG	A	608	2551	1958	2703	128	-14	11	C
ATOM	1691	CD	ARG	A	608	32.666	32.253	78.576	1.00	17.55		C
ANISOU	1691	CD	ARG	A	608	2249	1946	2474	-71	193	-106	C
ATOM	1692	NE	ARG	A	608	31.394	32.915	78.980	1.00	17.14		N
ANISOU	1692	NE	ARG	A	608	2186	1846	2482	97	-144	-33	N
ATOM	1693	CZ	ARG	A	608	30.504	33.396	78.114	1.00	15.88		C
ANISOU	1693	CZ	ARG	A	608	2051	1640	2343	97	109	27	C
ATOM	1694	NH1	ARG	A	608	30.772	33.443	76.823	1.00	15.44		N
ANISOU	1694	NH1	ARG	A	608	2086	1450	2331	-66	77	64	N
ATOM	1695	NH2	ARG	A	608	29.340	33.848	78.621	1.00	16.41		N
ANISOU	1695	NH2	ARG	A	608	1942	1619	2673	98	179	-61	N
ATOM	1696	N	ARG	A	609	35.453	27.620	77.789	1.00	18.06		N
ANISOU	1696	N	ARG	A	609	2279	2080	2503	-8	18	-48	N
ATOM	1697	CA	ARG	A	609	36.611	27.001	77.142	1.00	17.41		C
ANISOU	1697	CA	ARG	A	609	2022	2049	2543	13	56	1	C
ATOM	1698	C	ARG	A	609	36.359	25.524	76.856	1.00	17.72		C
ANISOU	1698	C	ARG	A	609	2243	2089	2400	-52	49	16	C
ATOM	1699	O	ARG	A	609	36.785	25.068	75.798	1.00	17.83		O
ANISOU	1699	O	ARG	A	609	2305	1896	2575	-72	73	-206	O
ATOM	1700	CB	ARG	A	609	37.832	27.155	78.056	1.00	18.95		C
ANISOU	1700	CB	ARG	A	609	2357	2325	2517	51	-52	31	C
ATOM	1701	CG	ARG	A	609	38.083	28.575	78.532	1.00	21.70		C
ANISOU	1701	CG	ARG	A	609	2856	2580	2809	-112	68	-75	C
ATOM	1702	CD	ARG	A	609	38.122	29.614	77.417	1.00	21.87		C
ANISOU	1702	CD	ARG	A	609	2675	2615	3020	106	13	73	C
ATOM	1703	NE	ARG	A	609	39.401	29.723	76.724	1.00	24.82		N
ANISOU	1703	NE	ARG	A	609	2951	3140	3338	-90	75	-19	N
ATOM	1704	CZ	ARG	A	609	39.663	30.813	75.980	1.00	25.69		C
ANISOU	1704	CZ	ARG	A	609	3153	3218	3391	19	52	56	C
ATOM	1705	NH1	ARG	A	609	40.843	30.889	75.381	1.00	26.94		N
ANISOU	1705	NH1	ARG	A	609	3289	3403	3543	-132	194	-78	N
ATOM	1706	NH2	ARG	A	609	38.761	31.798	75.850	1.00	25.09		N
ANISOU	1706	NH2	ARG	A	609	3025	3077	3430	-96	172	64	N

2025.04.15 14:00:00

ATOM	1707	N	PHE	A	610	35.615	24.839	77.721	1.00	17.97		N
ANISOU	1707	N	PHE	A	610	2169	2177	2481	-42	71	116	N
ATOM	1708	CA	PHE	A	610	35.353	23.406	77.523	1.00	17.48		C
ANISOU	1708	CA	PHE	A	610	2024	2123	2495	162	75	21	C
ATOM	1709	C	PHE	A	610	34.494	23.220	76.298	1.00	17.42		C
ANISOU	1709	C	PHE	A	610	2114	2179	2325	66	201	-2	C
ATOM	1710	O	PHE	A	610	34.816	22.420	75.417	1.00	18.23		O
ANISOU	1710	O	PHE	A	610	2474	2083	2370	229	142	65	O
ATOM	1711	CB	PHE	A	610	34.683	22.863	78.783	1.00	18.11		C
ANISOU	1711	CB	PHE	A	610	2222	2089	2570	217	122	94	C
ATOM	1712	CG	PHE	A	610	34.227	21.417	78.689	1.00	18.67		C
ANISOU	1712	CG	PHE	A	610	2564	2220	2310	-39	55	219	C
ATOM	1713	CD1	PHE	A	610	35.118	20.454	78.281	1.00	20.71		C
ANISOU	1713	CD1	PHE	A	610	2821	2309	2737	98	24	157	C
ATOM	1714	CD2	PHE	A	610	32.915	21.063	79.003	1.00	21.16		C
ANISOU	1714	CD2	PHE	A	610	2602	2602	2834	-148	56	104	C
ATOM	1715	CE1	PHE	A	610	34.719	19.116	78.219	1.00	21.69		C
ANISOU	1715	CE1	PHE	A	610	2966	2382	2894	32	-56	122	C
ATOM	1716	CE2	PHE	A	610	32.547	19.718	78.977	1.00	22.54		C
ANISOU	1716	CE2	PHE	A	610	3038	2531	2997	-67	238	29	C
ATOM	1717	CZ	PHE	A	610	33.426	18.739	78.552	1.00	21.82		C
ANISOU	1717	CZ	PHE	A	610	2836	2503	2951	73	43	209	C
ATOM	1718	N	ILE	A	611	33.380	23.998	76.222	1.00	16.24		N
ANISOU	1718	N	ILE	A	611	2012	1977	2182	127	16	228	N
ATOM	1719	CA	ILE	A	611	32.527	23.864	75.035	1.00	16.24		C
ANISOU	1719	CA	ILE	A	611	1939	1952	2280	201	12	-37	C
ATOM	1720	C	ILE	A	611	33.310	24.212	73.785	1.00	16.58		C
ANISOU	1720	C	ILE	A	611	2108	1858	2332	115	30	-64	C
ATOM	1721	O	ILE	A	611	33.189	23.530	72.756	1.00	17.64		O
ANISOU	1721	O	ILE	A	611	2382	2036	2285	181	-4	-69	O
ATOM	1722	CB	ILE	A	611	31.255	24.731	75.132	1.00	15.45		C
ANISOU	1722	CB	ILE	A	611	1902	1920	2050	285	104	-116	C
ATOM	1723	CG1	ILE	A	611	30.431	24.331	76.354	1.00	16.00		C
ANISOU	1723	CG1	ILE	A	611	1929	2044	2105	247	56	-62	C
ATOM	1724	CG2	ILE	A	611	30.424	24.655	73.846	1.00	16.68		C
ANISOU	1724	CG2	ILE	A	611	2073	2138	2127	41	70	-19	C
ATOM	1725	CD1	ILE	A	611	29.280	25.311	76.605	1.00	16.86		C
ANISOU	1725	CD1	ILE	A	611	2262	2219	1925	401	-30	-205	C
ATOM	1726	N	ALA	A	612	34.115	25.268	73.772	1.00	18.62		N
ANISOU	1726	N	ALA	A	612	2225	2017	2834	152	170	-39	N
ATOM	1727	CA	ALA	A	612	34.911	25.624	72.624	1.00	18.38		C
ANISOU	1727	CA	ALA	A	612	2398	2081	2504	55	68	-93	C
ATOM	1728	C	ALA	A	612	35.832	24.451	72.239	1.00	19.28		C
ANISOU	1728	C	ALA	A	612	2371	2340	2613	185	70	-14	C
ATOM	1729	O	ALA	A	612	35.929	24.157	71.030	1.00	19.78		O
ANISOU	1729	O	ALA	A	612	2372	2552	2594	143	312	52	O
ATOM	1730	CB	ALA	A	612	35.736	26.885	72.841	1.00	19.07		C
ANISOU	1730	CB	ALA	A	612	2617	2230	2400	-100	30	-45	C
ATOM	1731	N	HIS	A	613	36.474	23.821	73.221	1.00	19.98		N
ANISOU	1731	N	HIS	A	613	2309	2476	2806	124	9	62	N
ATOM	1732	CA	HIS	A	613	37.329	22.651	72.937	1.00	20.47		C
ANISOU	1732	CA	HIS	A	613	2369	2469	2941	18	80	-62	C
ATOM	1733	C	HIS	A	613	36.547	21.510	72.290	1.00	21.13		C
ANISOU	1733	C	HIS	A	613	2664	2544	2821	-1	-62	-23	C
ATOM	1734	O	HIS	A	613	37.060	20.814	71.381	1.00	21.74		O
ANISOU	1734	O	HIS	A	613	2330	2938	2991	14	83	17	O
ATOM	1735	CB	HIS	A	613	37.903	22.187	74.295	1.00	22.31		C
ANISOU	1735	CB	HIS	A	613	2631	2841	3003	47	14	-116	C
ATOM	1736	CG	HIS	A	613	38.624	20.871	74.229	1.00	24.90		C
ANISOU	1736	CG	HIS	A	613	3020	3051	3390	203	-67	-22	C
ATOM	1737	ND1	HIS	A	613	39.879	20.744	73.679	1.00	27.12		N
ANISOU	1737	ND1	HIS	A	613	3270	3437	3598	175	104	-32	N
ATOM	1738	CD2	HIS	A	613	38.217	19.650	74.631	1.00	26.89		C
ANISOU	1738	CD2	HIS	A	613	3397	3212	3608	156	-67	101	C

ATOM	1739	CE1	HIS	A	613	40.233	19.464	73.770	1.00	27.29		C
ANISOU	1739	CE1	HIS	A	613	3385	3415	3569	128	-5	-39	C
ATOM	1740	NE2	HIS	A	613	39.255	18.777	74.316	1.00	28.03		N
ANISOU	1740	NE2	HIS	A	613	3602	3425	3622	209	134	33	N
ATOM	1741	N	LEU	A	614	35.327	21.253	72.788	1.00	19.66		N
ANISOU	1741	N	LEU	A	614	2392	2269	2811	80	-163	19	N
ATOM	1742	CA	LEU	A	614	34.491	20.168	72.213	1.00	20.01		C
ANISOU	1742	CA	LEU	A	614	2508	2301	2793	35	128	-122	C
ATOM	1743	C	LEU	A	614	34.231	20.439	70.750	1.00	19.65		C
ANISOU	1743	C	LEU	A	614	2353	2291	2821	107	89	-76	C
ATOM	1744	O	LEU	A	614	34.239	19.536	69.893	1.00	22.24		O
ANISOU	1744	O	LEU	A	614	2787	2573	3090	197	110	-310	O
ATOM	1745	CB	LEU	A	614	33.169	19.989	72.985	1.00	19.74		C
ANISOU	1745	CB	LEU	A	614	2497	2272	2730	44	63	-50	C
ATOM	1746	CG	LEU	A	614	33.308	19.558	74.459	1.00	19.67		C
ANISOU	1746	CG	LEU	A	614	2396	2295	2784	215	83	-35	C
ATOM	1747	CD1	LEU	A	614	31.949	19.510	75.146	1.00	19.67		C
ANISOU	1747	CD1	LEU	A	614	2708	2145	2621	-57	207	10	C
ATOM	1748	CD2	LEU	A	614	33.944	18.152	74.506	1.00	20.94		C
ANISOU	1748	CD2	LEU	A	614	3022	2012	2923	15	120	40	C
ATOM	1749	N	ILE	A	615	33.965	21.698	70.391	1.00	18.12		N
ANISOU	1749	N	ILE	A	615	2168	2250	2465	-32	144	31	N
ATOM	1750	CA	ILE	A	615	33.720	22.059	68.995	1.00	18.12		C
ANISOU	1750	CA	ILE	A	615	2398	2077	2409	99	85	-72	C
ATOM	1751	C	ILE	A	615	34.967	21.831	68.146	1.00	20.48		C
ANISOU	1751	C	ILE	A	615	2572	2621	2588	-51	178	-32	C
ATOM	1752	O	ILE	A	615	34.860	21.203	67.080	1.00	22.69		O
ANISOU	1752	O	ILE	A	615	2927	2694	3001	-15	307	-278	O
ATOM	1753	CB	ILE	A	615	33.263	23.546	68.925	1.00	18.30		C
ANISOU	1753	CB	ILE	A	615	2496	2017	2441	25	86	-122	C
ATOM	1754	CG1	ILE	A	615	31.880	23.653	69.547	1.00	17.52		C
ANISOU	1754	CG1	ILE	A	615	2422	1987	2248	-41	134	-141	C
ATOM	1755	CG2	ILE	A	615	33.228	23.975	67.481	1.00	20.24		C
ANISOU	1755	CG2	ILE	A	615	2754	2517	2418	88	45	-112	C
ATOM	1756	CD1	ILE	A	615	31.356	25.064	69.831	1.00	18.55		C
ANISOU	1756	CD1	ILE	A	615	2472	2053	2523	56	20	-102	C
ATOM	1757	N	LEU	A	616	36.102	22.327	68.598	1.00	21.45		N
ANISOU	1757	N	LEU	A	616	2581	2872	2696	-49	166	-217	N
ATOM	1758	CA	LEU	A	616	37.342	22.218	67.795	1.00	22.75		C
ANISOU	1758	CA	LEU	A	616	2616	3016	3014	95	242	-179	C
ATOM	1759	C	LEU	A	616	37.803	20.779	67.676	1.00	24.30		C
ANISOU	1759	C	LEU	A	616	3075	3016	3144	87	131	-173	C
ATOM	1760	O	LEU	A	616	38.525	20.439	66.709	1.00	27.12		O
ANISOU	1760	O	LEU	A	616	3319	3620	3367	101	421	-246	O
ATOM	1761	CB	LEU	A	616	38.463	23.090	68.401	1.00	24.20		C
ANISOU	1761	CB	LEU	A	616	2926	3134	3137	24	79	-87	C
ATOM	1762	CG	LEU	A	616	38.143	24.601	68.424	1.00	23.96		C
ANISOU	1762	CG	LEU	A	616	2932	3094	3077	-67	43	-97	C
ATOM	1763	CD1	LEU	A	616	39.340	25.345	69.003	1.00	24.71		C
ANISOU	1763	CD1	LEU	A	616	2827	3304	3257	-99	143	-95	C
ATOM	1764	CD2	LEU	A	616	37.687	25.127	67.070	1.00	24.18		C
ANISOU	1764	CD2	LEU	A	616	2823	3353	3010	-112	183	-93	C
ATOM	1765	N	THR	A	617	37.465	19.938	68.624	1.00	24.70		N
ANISOU	1765	N	THR	A	617	3019	3206	3160	143	74	-76	N
ATOM	1766	CA	THR	A	617	37.874	18.535	68.575	1.00	26.86		C
ANISOU	1766	CA	THR	A	617	3444	3234	3529	140	6	-81	C
ATOM	1767	C	THR	A	617	36.800	17.638	67.990	1.00	27.41		C
ANISOU	1767	C	THR	A	617	3561	3318	3537	100	-42	-81	C
ATOM	1768	O	THR	A	617	36.922	16.401	68.061	1.00	27.99		O
ANISOU	1768	O	THR	A	617	3683	3287	3663	205	22	49	O
ATOM	1769	CB	THR	A	617	38.363	18.063	69.958	1.00	27.91		C
ANISOU	1769	CB	THR	A	617	3614	3416	3574	44	0	33	C
ATOM	1770	OG1	THR	A	617	37.296	18.211	70.880	1.00	27.25		O
ANISOU	1770	OG1	THR	A	617	3519	3134	3702	273	-46	-40	O

2025.04.14 14:00:00

ATOM	1771	CG2	THR	A	617	39.576	18.891	70.379	1.00	28.06		C
ANISOU	1771	CG2	THR	A	617	3685	3282	3695	105	-26	-73	C
ATOM	1772	N	ASP	A	618	35.777	18.223	67.367	1.00	26.05		N
ANISOU	1772	N	ASP	A	618	3386	3188	3323	184	145	-162	N
ATOM	1773	CA	ASP	A	618	34.752	17.468	66.657	1.00	26.29		C
ANISOU	1773	CA	ASP	A	618	3300	3247	3443	103	141	-90	C
ATOM	1774	C	ASP	A	618	34.217	16.378	67.564	1.00	26.42		C
ANISOU	1774	C	ASP	A	618	3335	3310	3394	-1	36	-48	C
ATOM	1775	O	ASP	A	618	34.106	15.184	67.231	1.00	28.47		O
ANISOU	1775	O	ASP	A	618	3766	3429	3621	97	265	-221	O
ATOM	1776	CB	ASP	A	618	35.387	16.865	65.402	1.00	27.42		C
ANISOU	1776	CB	ASP	A	618	3593	3470	3355	18	124	-86	C
ATOM	1777	CG	ASP	A	618	34.473	16.394	64.307	1.00	29.38		C
ANISOU	1777	CG	ASP	A	618	3695	3827	3643	64	20	-170	C
ATOM	1778	OD1	ASP	A	618	33.272	16.690	64.259	1.00	28.30		O
ANISOU	1778	OD1	ASP	A	618	3575	3617	3561	46	30	-177	O
ATOM	1779	OD2	ASP	A	618	35.013	15.712	63.385	1.00	30.41		O
ANISOU	1779	OD2	ASP	A	618	3908	3839	3806	114	83	-324	O
ATOM	1780	N	ALA	A	619	33.736	16.776	68.731	1.00	26.15		N
ANISOU	1780	N	ALA	A	619	3280	3141	3515	-6	105	-129	N
ATOM	1781	CA	ALA	A	619	33.275	15.864	69.770	1.00	27.62		C
ANISOU	1781	CA	ALA	A	619	3633	3383	3477	81	45	-32	C
ATOM	1782	C	ALA	A	619	32.068	15.032	69.419	1.00	27.85		C
ANISOU	1782	C	ALA	A	619	3762	3295	3526	73	63	-134	C
ATOM	1783	O	ALA	A	619	31.819	14.056	70.136	1.00	28.62		O
ANISOU	1783	O	ALA	A	619	4120	3361	3392	-16	121	-227	O
ATOM	1784	CB	ALA	A	619	33.022	16.646	71.066	1.00	29.09		C
ANISOU	1784	CB	ALA	A	619	4019	3553	3483	52	91	-75	C
ATOM	1785	N	LEU	A	620	31.326	15.357	68.371	1.00	26.99		N
ANISOU	1785	N	LEU	A	620	3593	3232	3429	44	102	-257	N
ATOM	1786	CA	LEU	A	620	30.151	14.556	68.024	1.00	27.73		C
ANISOU	1786	CA	LEU	A	620	3608	3365	3564	-6	36	-209	C
ATOM	1787	C	LEU	A	620	30.529	13.416	67.070	1.00	30.37		C
ANISOU	1787	C	LEU	A	620	4115	3680	3744	20	96	-361	C
ATOM	1788	O	LEU	A	620	29.596	12.684	66.711	1.00	31.58		O
ANISOU	1788	O	LEU	A	620	4099	3835	4064	-36	218	-362	O
ATOM	1789	CB	LEU	A	620	29.050	15.406	67.434	1.00	26.26		C
ANISOU	1789	CB	LEU	A	620	3465	3153	3361	-103	93	-317	C
ATOM	1790	CG	LEU	A	620	28.679	16.652	68.271	1.00	25.84		C
ANISOU	1790	CG	LEU	A	620	3365	3163	3290	44	50	-245	C
ATOM	1791	CD1	LEU	A	620	27.702	17.486	67.465	1.00	25.51		C
ANISOU	1791	CD1	LEU	A	620	3310	3188	3196	-106	7	-167	C
ATOM	1792	CD2	LEU	A	620	28.148	16.243	69.630	1.00	26.24		C
ANISOU	1792	CD2	LEU	A	620	3379	3280	3310	-85	-37	-155	C
ATOM	1793	N	LYS	A	621	31.796	13.208	66.768	1.00	32.72		N
ANISOU	1793	N	LYS	A	621	4175	3990	4266	50	99	-65	N
ATOM	1794	CA	LYS	A	621	32.184	12.071	65.922	1.00	36.62		C
ANISOU	1794	CA	LYS	A	621	4758	4481	4676	149	201	-311	C
ATOM	1795	C	LYS	A	621	31.137	11.666	64.901	1.00	38.99		C
ANISOU	1795	C	LYS	A	621	4958	4897	4960	54	19	-146	C
ATOM	1796	O	LYS	A	621	31.105	10.428	64.598	1.00	41.65		O
ANISOU	1796	O	LYS	A	621	5441	4896	5488	39	90	-189	O
ATOM	1797	CB	LYS	A	621	32.540	10.823	66.748	1.00	39.07		C
ANISOU	1797	CB	LYS	A	621	5043	4693	5111	159	37	-98	C
ATOM	1798	CG	LYS	A	621	31.583	10.196	67.684	1.00	42.00		C
ANISOU	1798	CG	LYS	A	621	5286	5345	5328	30	128	-25	C
ATOM	1799	CD	LYS	A	621	31.797	8.768	68.147	1.00	44.44		C
ANISOU	1799	CD	LYS	A	621	5734	5463	5688	60	47	36	C
ATOM	1800	CE	LYS	A	621	30.905	7.777	67.425	1.00	45.57		C
ANISOU	1800	CE	LYS	A	621	5760	5741	5813	-48	20	10	C
ATOM	1801	NZ	LYS	A	621	31.375	6.374	67.661	1.00	46.21		N
ANISOU	1801	NZ	LYS	A	621	5891	5768	5900	-2	-48	-29	N
TER	1802		LYS	A	621							
ATOM	1803	N	PRO	B	20	5.110	13.180	40.537	1.00	61.48		N

ANISOU	1803	N	PRO	B	20	7765	7820	7774	-4	16	-39	N
ATOM	1804	CA	PRO	B	20	5.653	13.683	41.845	1.00	61.11		C
ANISOU	1804	CA	PRO	B	20	7685	7788	7747	43	9	-2	C
ATOM	1805	C	PRO	B	20	6.859	12.823	42.221	1.00	60.40		C
ANISOU	1805	C	PRO	B	20	7627	7719	7601	5	48	-25	C
ATOM	1806	O	PRO	B	20	7.088	12.459	43.370	1.00	60.60		O
ANISOU	1806	O	PRO	B	20	7696	7700	7627	-3	21	21	O
ATOM	1807	N	GLU	B	21	7.642	12.514	41.182	1.00	59.31		N
ANISOU	1807	N	GLU	B	21	7454	7536	7546	63	-23	2	N
ATOM	1808	CA	GLU	B	21	8.823	11.690	41.325	1.00	56.74		C
ANISOU	1808	CA	GLU	B	21	7183	7225	7151	-114	12	-50	C
ATOM	1809	C	GLU	B	21	10.081	12.447	41.693	1.00	54.30		C
ANISOU	1809	C	GLU	B	21	6933	6896	6803	36	102	28	C
ATOM	1810	O	GLU	B	21	10.419	12.521	42.878	1.00	55.02		O
ANISOU	1810	O	GLU	B	21	6999	7017	6888	13	14	-39	O
ATOM	1811	N	THR	B	22	10.789	13.010	40.719	1.00	51.54		N
ANISOU	1811	N	THR	B	22	6494	6494	6594	-2	-83	-100	N
ATOM	1812	CA	THR	B	22	12.066	13.658	40.960	1.00	48.75		C
ANISOU	1812	CA	THR	B	22	6360	6038	6125	63	2	-91	C
ATOM	1813	C	THR	B	22	11.996	15.039	41.602	1.00	45.57		C
ANISOU	1813	C	THR	B	22	5738	5853	5725	79	31	51	C
ATOM	1814	O	THR	B	22	13.004	15.512	42.136	1.00	43.92		O
ANISOU	1814	O	THR	B	22	5775	5404	5507	115	143	-37	O
ATOM	1815	CB	THR	B	22	12.928	13.823	39.683	1.00	49.62		C
ANISOU	1815	CB	THR	B	22	6344	6270	6242	10	12	0	C
ATOM	1816	OG1	THR	B	22	12.271	14.675	38.736	1.00	49.60		O
ANISOU	1816	OG1	THR	B	22	6338	6290	6217	-68	-66	16	O
ATOM	1817	CG2	THR	B	22	13.218	12.478	39.042	1.00	50.11		C
ANISOU	1817	CG2	THR	B	22	6447	6295	6298	-2	3	-50	C
ATOM	1818	N	HIS	B	23	10.849	15.690	41.493	1.00	43.04		N
ANISOU	1818	N	HIS	B	23	5682	5429	5241	-4	35	-57	N
ATOM	1819	CA	HIS	B	23	10.705	17.037	42.018	1.00	41.20		C
ANISOU	1819	CA	HIS	B	23	5248	5383	5024	14	135	-13	C
ATOM	1820	C	HIS	B	23	9.853	17.065	43.283	1.00	38.16		C
ANISOU	1820	C	HIS	B	23	4955	4794	4752	12	-43	-40	C
ATOM	1821	O	HIS	B	23	9.121	16.125	43.560	1.00	36.19		O
ANISOU	1821	O	HIS	B	23	4696	4817	4237	58	125	-171	O
ATOM	1822	CB	HIS	B	23	10.117	17.932	40.916	1.00	43.73		C
ANISOU	1822	CB	HIS	B	23	5636	5572	5405	81	-69	83	C
ATOM	1823	CG	HIS	B	23	11.122	18.006	39.795	1.00	45.32		C
ANISOU	1823	CG	HIS	B	23	5754	5826	5639	44	32	60	C
ATOM	1824	ND1	HIS	B	23	10.988	17.306	38.613	1.00	45.91		N
ANISOU	1824	ND1	HIS	B	23	5844	5796	5803	33	-27	-28	N
ATOM	1825	CD2	HIS	B	23	12.289	18.675	39.727	1.00	45.45		C
ANISOU	1825	CD2	HIS	B	23	5678	5868	5723	47	-88	35	C
ATOM	1826	CE1	HIS	B	23	12.038	17.579	37.860	1.00	46.16		C
ANISOU	1826	CE1	HIS	B	23	5833	5845	5861	27	-14	18	C
ATOM	1827	NE2	HIS	B	23	12.853	18.398	38.510	1.00	45.79		N
ANISOU	1827	NE2	HIS	B	23	5779	5879	5742	73	-56	12	N
ATOM	1828	N	ILE	B	24	10.037	18.130	44.055	1.00	35.73		N
ANISOU	1828	N	ILE	B	24	4644	4712	4221	46	65	96	N
ATOM	1829	CA	ILE	B	24	9.266	18.228	45.309	1.00	34.64		C
ANISOU	1829	CA	ILE	B	24	4411	4542	4207	59	2	-16	C
ATOM	1830	C	ILE	B	24	8.755	19.636	45.485	1.00	33.36		C
ANISOU	1830	C	ILE	B	24	4205	4508	3964	-13	65	-13	C
ATOM	1831	O	ILE	B	24	9.443	20.604	45.140	1.00	33.90		O
ANISOU	1831	O	ILE	B	24	4417	4464	4000	86	238	-41	O
ATOM	1832	CB	ILE	B	24	10.176	17.769	46.473	1.00	34.49		C
ANISOU	1832	CB	ILE	B	24	4433	4445	4229	47	-7	34	C
ATOM	1833	CG1	ILE	B	24	9.432	17.740	47.820	1.00	34.59		C
ANISOU	1833	CG1	ILE	B	24	4397	4470	4275	31	11	-4	C
ATOM	1834	CG2	ILE	B	24	11.431	18.624	46.600	1.00	34.31		C
ANISOU	1834	CG2	ILE	B	24	4362	4496	4177	83	48	35	C
ATOM	1835	CD1	ILE	B	24	10.315	17.225	48.953	1.00	34.94		C

Downloaded from www.jbc.org/

ANISOU	1835	CD1	ILE	B	24	4470	4561	4243	-54	-32	4	C
ATOM	1836	N	ASN	B	25	7.552	19.772	46.042	1.00	31.98		N
ANISOU	1836	N	ASN	B	25	4085	4308	3759	72	-28	5	N
ATOM	1837	CA	ASN	B	25	7.014	21.082	46.374	1.00	31.71		C
ANISOU	1837	CA	ASN	B	25	4157	4165	3725	-46	-15	73	C
ATOM	1838	C	ASN	B	25	7.301	21.371	47.863	1.00	31.16		C
ANISOU	1838	C	ASN	B	25	4094	4041	3705	4	67	41	C
ATOM	1839	O	ASN	B	25	7.057	20.526	48.734	1.00	30.08		O
ANISOU	1839	O	ASN	B	25	4073	4004	3352	145	-24	-10	O
ATOM	1840	CB	ASN	B	25	5.512	21.160	46.129	1.00	33.14		C
ANISOU	1840	CB	ASN	B	25	4208	4419	3965	33	-43	23	C
ATOM	1841	CG	ASN	B	25	5.198	20.951	44.637	1.00	33.80		C
ANISOU	1841	CG	ASN	B	25	4382	4484	3976	27	-34	58	C
ATOM	1842	OD1	ASN	B	25	5.366	21.915	43.902	1.00	34.49		O
ANISOU	1842	OD1	ASN	B	25	4398	4797	3911	21	-100	212	O
ATOM	1843	ND2	ASN	B	25	4.800	19.774	44.226	1.00	33.52		N
ANISOU	1843	ND2	ASN	B	25	4360	4642	3736	-70	-90	18	N
ATOM	1844	N	LEU	B	26	7.859	22.537	48.128	1.00	29.72		N
ANISOU	1844	N	LEU	B	26	3737	4092	3461	10	49	18	N
ATOM	1845	CA	LEU	B	26	8.206	22.949	49.479	1.00	29.18		C
ANISOU	1845	CA	LEU	B	26	3705	3863	3519	-15	26	-39	C
ATOM	1846	C	LEU	B	26	7.736	24.371	49.741	1.00	30.72		C
ANISOU	1846	C	LEU	B	26	4018	3969	3687	89	27	-27	C
ATOM	1847	O	LEU	B	26	7.687	25.217	48.846	1.00	31.50		O
ANISOU	1847	O	LEU	B	26	4314	4057	3598	177	171	-39	O
ATOM	1848	CB	LEU	B	26	9.731	22.863	49.685	1.00	28.96		C
ANISOU	1848	CB	LEU	B	26	3717	3871	3416	18	0	33	C
ATOM	1849	CG	LEU	B	26	10.331	21.453	49.656	1.00	28.32		C
ANISOU	1849	CG	LEU	B	26	3564	3813	3382	-41	-20	-55	C
ATOM	1850	CD1	LEU	B	26	11.866	21.481	49.715	1.00	29.50		C
ANISOU	1850	CD1	LEU	B	26	3586	3992	3629	-51	-21	-27	C
ATOM	1851	CD2	LEU	B	26	9.767	20.542	50.729	1.00	29.13		C
ANISOU	1851	CD2	LEU	B	26	3629	3955	3484	-52	-64	15	C
ATOM	1852	N	LYS	B	27	7.401	24.629	51.014	1.00	29.78		N
ANISOU	1852	N	LYS	B	27	3771	3974	3572	-27	-52	-9	N
ATOM	1853	CA	LYS	B	27	7.012	25.998	51.363	1.00	30.79		C
ANISOU	1853	CA	LYS	B	27	3892	4060	3746	-9	-95	-64	C
ATOM	1854	C	LYS	B	27	8.038	26.495	52.384	1.00	29.56		C
ANISOU	1854	C	LYS	B	27	3726	3835	3668	24	6	-100	C
ATOM	1855	O	LYS	B	27	8.414	25.686	53.235	1.00	29.68		O
ANISOU	1855	O	LYS	B	27	3728	3844	3704	-22	-156	-112	O
ATOM	1856	CB	LYS	B	27	5.631	26.014	51.972	1.00	32.36		C
ANISOU	1856	CB	LYS	B	27	3900	4374	4022	-72	-108	22	C
ATOM	1857	CG	LYS	B	27	5.156	27.280	52.653	1.00	35.05		C
ANISOU	1857	CG	LYS	B	27	4381	4510	4427	67	-44	-26	C
ATOM	1858	CD	LYS	B	27	3.673	27.065	52.992	1.00	36.85		C
ANISOU	1858	CD	LYS	B	27	4419	4881	4702	53	-45	13	C
ATOM	1859	CE	LYS	B	27	3.416	27.273	54.463	1.00	38.44		C
ANISOU	1859	CE	LYS	B	27	4810	5039	4757	68	-37	18	C
ATOM	1860	NZ	LYS	B	27	1.957	27.453	54.704	1.00	38.50		N
ANISOU	1860	NZ	LYS	B	27	4762	5081	4784	-23	50	-3	N
ATOM	1861	N	VAL	B	28	8.462	27.741	52.287	1.00	28.44		N
ANISOU	1861	N	VAL	B	28	3494	3850	3460	101	98	-40	N
ATOM	1862	CA	VAL	B	28	9.336	28.264	53.341	1.00	28.28		C
ANISOU	1862	CA	VAL	B	28	3600	3584	3560	109	12	-89	C
ATOM	1863	C	VAL	B	28	8.510	29.348	54.057	1.00	28.57		C
ANISOU	1863	C	VAL	B	28	3640	3685	3532	117	141	-49	C
ATOM	1864	O	VAL	B	28	7.940	30.162	53.332	1.00	29.58		O
ANISOU	1864	O	VAL	B	28	3832	3778	3631	302	89	-128	O
ATOM	1865	CB	VAL	B	28	10.636	28.862	52.835	1.00	28.62		C
ANISOU	1865	CB	VAL	B	28	3723	3645	3508	26	-11	-37	C
ATOM	1866	CG1	VAL	B	28	11.509	29.407	53.974	1.00	28.63		C
ANISOU	1866	CG1	VAL	B	28	3864	3620	3394	51	-71	70	C
ATOM	1867	CG2	VAL	B	28	11.430	27.758	52.137	1.00	28.83		C

ANISOU	1867	CG2	VAL	B	28	3817	3688	3451	131	38	46	C
ATOM	1868	N	SER	B	29	8.475	29.305	55.375	1.00	27.01		N
ANISOU	1868	N	SER	B	29	3435	3337	3488	97	26	-78	N
ATOM	1869	CA	SER	B	29	7.676	30.330	56.066	1.00	27.64		C
ANISOU	1869	CA	SER	B	29	3494	3515	3494	39	146	-118	C
ATOM	1870	C	SER	B	29	8.450	30.928	57.238	1.00	27.95		C
ANISOU	1870	C	SER	B	29	3356	3719	3545	60	15	-4	C
ATOM	1871	O	SER	B	29	9.036	30.132	57.935	1.00	27.98		O
ANISOU	1871	O	SER	B	29	3400	3826	3404	5	20	82	O
ATOM	1872	CB	SER	B	29	6.434	29.666	56.688	1.00	27.35		C
ANISOU	1872	CB	SER	B	29	3348	3631	3414	-28	5	-133	C
ATOM	1873	OG	SER	B	29	5.618	30.700	57.245	1.00	28.47		O
ANISOU	1873	OG	SER	B	29	3408	3748	3660	108	-222	-241	O
ATOM	1874	N	ASP	B	30	8.296	32.232	57.468	1.00	29.97		N
ANISOU	1874	N	ASP	B	30	3855	3745	3787	-8	59	-15	N
ATOM	1875	CA	ASP	B	30	8.865	32.804	58.687	1.00	31.94		C
ANISOU	1875	CA	ASP	B	30	4057	4063	4016	44	-190	1	C
ATOM	1876	C	ASP	B	30	7.739	33.119	59.670	1.00	32.68		C
ANISOU	1876	C	ASP	B	30	4366	4094	3957	-35	-20	156	C
ATOM	1877	O	ASP	B	30	7.947	33.860	60.627	1.00	33.73		O
ANISOU	1877	O	ASP	B	30	4556	4160	4100	36	-107	80	O
ATOM	1878	CB	ASP	B	30	9.710	34.046	58.429	1.00	32.87		C
ANISOU	1878	CB	ASP	B	30	4267	4038	4184	63	-61	43	C
ATOM	1879	CG	ASP	B	30	8.915	35.173	57.776	1.00	33.72		C
ANISOU	1879	CG	ASP	B	30	4407	4149	4259	55	-90	120	C
ATOM	1880	OD1	ASP	B	30	7.684	35.039	57.697	1.00	33.45		O
ANISOU	1880	OD1	ASP	B	30	4354	4133	4221	268	-98	101	O
ATOM	1881	OD2	ASP	B	30	9.609	36.136	57.394	1.00	34.14		O
ANISOU	1881	OD2	ASP	B	30	4575	4060	4337	21	-154	133	O
ATOM	1882	N	GLY	B	31	6.523	32.650	59.366	1.00	33.99		N
ANISOU	1882	N	GLY	B	31	4279	4372	4263	75	-84	201	N
ATOM	1883	CA	GLY	B	31	5.377	32.943	60.232	1.00	35.82		C
ANISOU	1883	CA	GLY	B	31	4501	4628	4483	-18	78	107	C
ATOM	1884	C	GLY	B	31	4.545	34.087	59.654	1.00	37.63		C
ANISOU	1884	C	GLY	B	31	4733	4710	4856	84	-56	16	C
ATOM	1885	O	GLY	B	31	3.410	34.293	60.088	1.00	38.14		O
ANISOU	1885	O	GLY	B	31	4836	4778	4875	178	65	73	O
ATOM	1886	N	SER	B	32	5.075	34.839	58.696	1.00	39.48		N
ANISOU	1886	N	SER	B	32	5045	5039	4915	24	53	48	N
ATOM	1887	CA	SER	B	32	4.230	35.913	58.137	1.00	41.83		C
ANISOU	1887	CA	SER	B	32	5291	5287	5315	138	-36	101	C
ATOM	1888	C	SER	B	32	4.388	35.939	56.629	1.00	41.91		C
ANISOU	1888	C	SER	B	32	5324	5281	5318	57	-33	44	C
ATOM	1889	O	SER	B	32	3.430	36.142	55.889	1.00	42.31		O
ANISOU	1889	O	SER	B	32	5320	5338	5418	-4	-88	-18	O
ATOM	1890	CB	SER	B	32	4.483	37.238	58.820	1.00	43.48		C
ANISOU	1890	CB	SER	B	32	5586	5412	5522	47	-40	17	C
ATOM	1891	OG	SER	B	32	5.833	37.625	58.826	1.00	45.44		O
ANISOU	1891	OG	SER	B	32	5627	5812	5826	43	-37	128	O
ATOM	1892	N	SER	B	33	5.603	35.698	56.179	1.00	41.29		N
ANISOU	1892	N	SER	B	33	5337	5177	5173	70	-18	43	N
ATOM	1893	CA	SER	B	33	5.909	35.639	54.751	1.00	40.95		C
ANISOU	1893	CA	SER	B	33	5275	5148	5135	58	-77	-16	C
ATOM	1894	C	SER	B	33	6.145	34.181	54.379	1.00	39.85		C
ANISOU	1894	C	SER	B	33	5060	5125	4957	89	-75	-27	C
ATOM	1895	O	SER	B	33	6.910	33.481	55.051	1.00	38.57		O
ANISOU	1895	O	SER	B	33	4927	5004	4725	-19	-47	-26	O
ATOM	1896	CB	SER	B	33	7.114	36.520	54.479	1.00	41.78		C
ANISOU	1896	CB	SER	B	33	5333	5254	5287	3	-43	24	C
ATOM	1897	OG	SER	B	33	7.800	36.180	53.287	1.00	43.51		O
ANISOU	1897	OG	SER	B	33	5620	5484	5429	64	70	-39	O
ATOM	1898	N	GLU	B	34	5.421	33.685	53.375	1.00	39.09		N
ANISOU	1898	N	GLU	B	34	4914	5033	4906	136	-64	19	N
ATOM	1899	CA	GLU	B	34	5.625	32.300	52.943	1.00	39.40		C

ANISOU	1899	CA	GLU	B	34	5037	5061	4872	143	-93	-7	C
ATOM	1900	C	GLU	B	34	5.855	32.255	51.441	1.00	38.17		C
ANISOU	1900	C	GLU	B	34	4759	4880	4865	143	-9	44	C
ATOM	1901	O	GLU	B	34	5.247	33.013	50.670	1.00	37.97		O
ANISOU	1901	O	GLU	B	34	4720	4965	4740	183	-64	30	O
ATOM	1902	CB	GLU	B	34	4.538	31.363	53.413	1.00	42.32		C
ANISOU	1902	CB	GLU	B	34	5384	5292	5403	-37	18	26	C
ATOM	1903	CG	GLU	B	34	3.092	31.728	53.153	1.00	45.21		C
ANISOU	1903	CG	GLU	B	34	5558	5793	5826	55	-86	-39	C
ATOM	1904	CD	GLU	B	34	2.231	31.106	54.254	1.00	47.57		C
ANISOU	1904	CD	GLU	B	34	5946	6095	6033	-38	45	64	C
ATOM	1905	OE1	GLU	B	34	1.935	31.835	55.239	1.00	49.22		O
ANISOU	1905	OE1	GLU	B	34	6208	6370	6124	-7	64	-12	O
ATOM	1906	OE2	GLU	B	34	1.882	29.922	54.132	1.00	47.63		O
ANISOU	1906	OE2	GLU	B	34	5936	6094	6066	10	45	-17	O
ATOM	1907	N	ILE	B	35	6.854	31.475	51.029	1.00	36.43		N
ANISOU	1907	N	ILE	B	35	4694	4738	4411	129	-75	44	N
ATOM	1908	CA	ILE	B	35	7.209	31.364	49.611	1.00	35.38		C
ANISOU	1908	CA	ILE	B	35	4485	4541	4415	115	-44	85	C
ATOM	1909	C	ILE	B	35	7.201	29.890	49.233	1.00	33.87		C
ANISOU	1909	C	ILE	B	35	4233	4495	4139	141	-1	101	C
ATOM	1910	O	ILE	B	35	7.742	29.056	49.957	1.00	32.10		O
ANISOU	1910	O	ILE	B	35	4048	4560	3589	101	205	166	O
ATOM	1911	CB	ILE	B	35	8.583	31.989	49.305	1.00	35.74		C
ANISOU	1911	CB	ILE	B	35	4594	4558	4428	71	9	70	C
ATOM	1912	CG1	ILE	B	35	8.655	33.440	49.757	1.00	35.99		C
ANISOU	1912	CG1	ILE	B	35	4649	4557	4470	20	-50	107	C
ATOM	1913	CG2	ILE	B	35	8.849	31.836	47.813	1.00	35.28		C
ANISOU	1913	CG2	ILE	B	35	4494	4515	4395	24	16	108	C
ATOM	1914	CD1	ILE	B	35	10.009	34.086	49.738	1.00	37.60		C
ANISOU	1914	CD1	ILE	B	35	4766	4690	4831	-38	-50	51	C
ATOM	1915	N	PHE	B	36	6.546	29.539	48.130	1.00	33.78		N
ANISOU	1915	N	PHE	B	36	4335	4443	4059	122	34	124	N
ATOM	1916	CA	PHE	B	36	6.443	28.183	47.636	1.00	34.11		C
ANISOU	1916	CA	PHE	B	36	4385	4468	4107	66	50	100	C
ATOM	1917	C	PHE	B	36	7.487	27.964	46.537	1.00	33.99		C
ANISOU	1917	C	PHE	B	36	4333	4388	4194	96	10	60	C
ATOM	1918	O	PHE	B	36	7.753	28.877	45.747	1.00	32.71		O
ANISOU	1918	O	PHE	B	36	4170	4417	3843	126	108	-43	O
ATOM	1919	CB	PHE	B	36	5.076	27.884	47.022	1.00	36.02		C
ANISOU	1919	CB	PHE	B	36	4508	4717	4459	27	-32	23	C
ATOM	1920	CG	PHE	B	36	3.984	27.916	48.065	1.00	37.58		C
ANISOU	1920	CG	PHE	B	36	4635	4993	4653	18	54	10	C
ATOM	1921	CD1	PHE	B	36	3.421	29.125	48.440	1.00	38.57		C
ANISOU	1921	CD1	PHE	B	36	4841	5031	4783	50	-2	-21	C
ATOM	1922	CD2	PHE	B	36	3.556	26.746	48.651	1.00	38.52		C
ANISOU	1922	CD2	PHE	B	36	4818	4985	4834	13	-1	42	C
ATOM	1923	CE1	PHE	B	36	2.404	29.155	49.389	1.00	38.81		C
ANISOU	1923	CE1	PHE	B	36	4791	5081	4875	15	16	-17	C
ATOM	1924	CE2	PHE	B	36	2.540	26.776	49.605	1.00	39.51		C
ANISOU	1924	CE2	PHE	B	36	4963	5111	4939	25	77	-31	C
ATOM	1925	CZ	PHE	B	36	1.981	27.980	49.968	1.00	39.14		C
ANISOU	1925	CZ	PHE	B	36	4847	5070	4955	36	18	9	C
ATOM	1926	N	PHE	B	37	8.125	26.806	46.615	1.00	33.20		N
ANISOU	1926	N	PHE	B	37	4255	4317	4042	72	31	11	N
ATOM	1927	CA	PHE	B	37	9.179	26.480	45.670	1.00	33.43		C
ANISOU	1927	CA	PHE	B	37	4142	4413	4149	38	12	38	C
ATOM	1928	C	PHE	B	37	8.946	25.074	45.152	1.00	34.30		C
ANISOU	1928	C	PHE	B	37	4313	4445	4274	30	3	4	C
ATOM	1929	O	PHE	B	37	8.320	24.252	45.809	1.00	35.32		O
ANISOU	1929	O	PHE	B	37	4473	4673	4273	-10	46	105	O
ATOM	1930	CB	PHE	B	37	10.555	26.496	46.355	1.00	32.86		C
ANISOU	1930	CB	PHE	B	37	4077	4273	4135	-8	53	22	C
ATOM	1931	CG	PHE	B	37	11.005	27.793	46.939	1.00	32.59		C

ANISOU	1931	CG	PHE	B	37	3979	4294	4111	-2	25	14	C
ATOM	1932	CD1	PHE	B	37	10.725	28.128	48.253	1.00	31.78		C
ANISOU	1932	CD1	PHE	B	37	3870	4151	4053	19	14	56	C
ATOM	1933	CD2	PHE	B	37	11.752	28.680	46.171	1.00	32.67		C
ANISOU	1933	CD2	PHE	B	37	4108	4218	4086	-24	24	65	C
ATOM	1934	CE1	PHE	B	37	11.151	29.334	48.782	1.00	32.32		C
ANISOU	1934	CE1	PHE	B	37	3985	4134	4160	36	-7	73	C
ATOM	1935	CE2	PHE	B	37	12.187	29.874	46.702	1.00	32.84		C
ANISOU	1935	CE2	PHE	B	37	4095	4228	4154	-11	45	46	C
ATOM	1936	CZ	PHE	B	37	11.898	30.207	48.008	1.00	32.48		C
ANISOU	1936	CZ	PHE	B	37	3993	4183	4165	33	37	68	C
ATOM	1937	N	LYS	B	38	9.514	24.772	43.986	1.00	34.78		N
ANISOU	1937	N	LYS	B	38	4435	4520	4258	-4	43	75	N
ATOM	1938	CA	LYS	B	38	9.412	23.419	43.418	1.00	35.03		C
ANISOU	1938	CA	LYS	B	38	4434	4480	4394	56	77	24	C
ATOM	1939	C	LYS	B	38	10.835	23.151	42.930	1.00	35.27		C
ANISOU	1939	C	LYS	B	38	4471	4531	4398	44	91	27	C
ATOM	1940	O	LYS	B	38	11.370	23.978	42.186	1.00	35.51		O
ANISOU	1940	O	LYS	B	38	4617	4626	4251	185	116	109	O
ATOM	1941	CB	LYS	B	38	8.416	23.338	42.285	1.00	35.88		C
ANISOU	1941	CB	LYS	B	38	4550	4670	4412	17	35	33	C
ATOM	1942	CG	LYS	B	38	8.187	21.954	41.684	1.00	37.63		C
ANISOU	1942	CG	LYS	B	38	4886	4732	4681	-13	59	-34	C
ATOM	1943	CD	LYS	B	38	6.987	22.028	40.721	1.00	39.86		C
ANISOU	1943	CD	LYS	B	38	5055	5177	4915	-37	-49	-21	C
ATOM	1944	CE	LYS	B	38	6.566	20.634	40.272	1.00	40.85		C
ANISOU	1944	CE	LYS	B	38	5294	5124	5104	-54	-17	44	C
ATOM	1945	NZ	LYS	B	38	5.525	20.674	39.200	1.00	41.09		N
ANISOU	1945	NZ	LYS	B	38	5071	5212	5330	-149	-8	-29	N
ATOM	1946	N	ILE	B	39	11.508	22.203	43.548	1.00	35.56		N
ANISOU	1946	N	ILE	B	39	4572	4566	4374	74	103	99	N
ATOM	1947	CA	ILE	B	39	12.888	21.931	43.200	1.00	36.28		C
ANISOU	1947	CA	ILE	B	39	4600	4666	4519	37	101	72	C
ATOM	1948	C	ILE	B	39	13.052	20.418	43.021	1.00	37.20		C
ANISOU	1948	C	ILE	B	39	4815	4709	4610	40	17	22	C
ATOM	1949	O	ILE	B	39	12.144	19.633	43.269	1.00	37.22		O
ANISOU	1949	O	ILE	B	39	5005	4663	4473	54	143	93	O
ATOM	1950	CB	ILE	B	39	13.934	22.407	44.215	1.00	36.31		C
ANISOU	1950	CB	ILE	B	39	4685	4600	4509	50	91	42	C
ATOM	1951	CG1	ILE	B	39	13.690	21.786	45.602	1.00	35.97		C
ANISOU	1951	CG1	ILE	B	39	4604	4581	4480	66	85	20	C
ATOM	1952	CG2	ILE	B	39	13.984	23.926	44.280	1.00	36.35		C
ANISOU	1952	CG2	ILE	B	39	4587	4609	4617	94	42	-2	C
ATOM	1953	CD1	ILE	B	39	14.899	21.909	46.507	1.00	35.73		C
ANISOU	1953	CD1	ILE	B	39	4679	4488	4410	78	103	-22	C
ATOM	1954	N	LYS	B	40	14.224	20.092	42.497	1.00	38.39		N
ANISOU	1954	N	LYS	B	40	4885	4980	4723	40	64	64	N
ATOM	1955	CA	LYS	B	40	14.540	18.670	42.308	1.00	40.36		C
ANISOU	1955	CA	LYS	B	40	5159	5087	5089	88	2	-12	C
ATOM	1956	C	LYS	B	40	14.870	18.131	43.687	1.00	39.69		C
ANISOU	1956	C	LYS	B	40	4975	5114	4991	100	91	-60	C
ATOM	1957	O	LYS	B	40	15.482	18.878	44.467	1.00	39.08		O
ANISOU	1957	O	LYS	B	40	4888	5122	4840	168	124	-20	O
ATOM	1958	CB	LYS	B	40	15.692	18.623	41.310	1.00	42.50		C
ANISOU	1958	CB	LYS	B	40	5274	5554	5320	36	107	36	C
ATOM	1959	CG	LYS	B	40	15.963	17.289	40.673	1.00	45.10		C
ANISOU	1959	CG	LYS	B	40	5778	5595	5762	41	21	-60	C
ATOM	1960	CD	LYS	B	40	16.599	17.454	39.290	1.00	47.24		C
ANISOU	1960	CD	LYS	B	40	6045	6017	5888	-11	120	38	C
ATOM	1961	CE	LYS	B	40	16.925	16.080	38.717	1.00	48.47		C
ANISOU	1961	CE	LYS	B	40	6184	6072	6161	32	75	-33	C
ATOM	1962	NZ	LYS	B	40	17.025	16.097	37.230	1.00	49.86		N
ANISOU	1962	NZ	LYS	B	40	6345	6392	6206	41	27	-3	N
ATOM	1963	N	LYS	B	41	14.557	16.882	43.983	1.00	40.13		N

ANISOU	1963	N	LYS	B	41	5096	5144	5006	135	131	-35	N
ATOM	1964	CA	LYS	B	41	14.899	16.318	45.286	1.00	40.89		C
ANISOU	1964	CA	LYS	B	41	5280	5194	5062	102	45	-44	C
ATOM	1965	C	LYS	B	41	16.389	16.230	45.541	1.00	40.76		C
ANISOU	1965	C	LYS	B	41	5276	5133	5079	105	15	-35	C
ATOM	1966	O	LYS	B	41	16.807	16.133	46.693	1.00	40.75		O
ANISOU	1966	O	LYS	B	41	5350	5144	4991	235	82	-100	O
ATOM	1967	CB	LYS	B	41	14.288	14.929	45.481	1.00	41.82		C
ANISOU	1967	CB	LYS	B	41	5347	5259	5285	13	-6	-29	C
ATOM	1968	CG	LYS	B	41	12.773	14.935	45.556	1.00	42.86		C
ANISOU	1968	CG	LYS	B	41	5413	5418	5455	64	58	-38	C
ATOM	1969	CD	LYS	B	41	12.231	13.519	45.685	1.00	43.64		C
ANISOU	1969	CD	LYS	B	41	5585	5463	5533	9	25	5	C
ATOM	1970	CE	LYS	B	41	10.715	13.496	45.785	1.00	44.40		C
ANISOU	1970	CE	LYS	B	41	5621	5660	5588	7	23	23	C
ATOM	1971	NZ	LYS	B	41	10.213	12.102	45.561	1.00	45.33		N
ANISOU	1971	NZ	LYS	B	41	5790	5727	5707	-54	13	3	N
ATOM	1972	N	THR	B	42	17.233	16.245	44.517	1.00	41.12		N
ANISOU	1972	N	THR	B	42	5338	5248	5039	103	18	-9	N
ATOM	1973	CA	THR	B	42	18.675	16.172	44.614	1.00	42.23		C
ANISOU	1973	CA	THR	B	42	5363	5471	5211	96	53	-46	C
ATOM	1974	C	THR	B	42	19.353	17.517	44.488	1.00	42.63		C
ANISOU	1974	C	THR	B	42	5424	5538	5235	64	45	-9	C
ATOM	1975	O	THR	B	42	20.585	17.660	44.487	1.00	42.26		O
ANISOU	1975	O	THR	B	42	5409	5601	5047	127	170	25	O
ATOM	1976	CB	THR	B	42	19.143	15.222	43.480	1.00	42.58		C
ANISOU	1976	CB	THR	B	42	5404	5432	5342	104	47	-84	C
ATOM	1977	OG1	THR	B	42	18.661	15.746	42.227	1.00	43.06		O
ANISOU	1977	OG1	THR	B	42	5516	5531	5315	115	29	-113	O
ATOM	1978	CG2	THR	B	42	18.582	13.827	43.689	1.00	42.38		C
ANISOU	1978	CG2	THR	B	42	5284	5458	5362	81	37	-43	C
ATOM	1979	N	THR	B	43	18.582	18.611	44.464	1.00	43.40		N
ANISOU	1979	N	THR	B	43	5545	5622	5325	113	79	-5	N
ATOM	1980	CA	THR	B	43	19.131	19.963	44.394	1.00	44.00		C
ANISOU	1980	CA	THR	B	43	5568	5659	5491	54	63	-25	C
ATOM	1981	C	THR	B	43	19.334	20.517	45.794	1.00	43.80		C
ANISOU	1981	C	THR	B	43	5498	5638	5508	61	30	-3	C
ATOM	1982	O	THR	B	43	18.456	20.385	46.642	1.00	43.49		O
ANISOU	1982	O	THR	B	43	5646	5554	5325	129	49	53	O
ATOM	1983	CB	THR	B	43	18.139	20.834	43.595	1.00	45.06		C
ANISOU	1983	CB	THR	B	43	5689	5745	5686	38	-26	20	C
ATOM	1984	OG1	THR	B	43	18.178	20.410	42.221	1.00	46.72		O
ANISOU	1984	OG1	THR	B	43	6001	6030	5720	23	34	-18	O
ATOM	1985	CG2	THR	B	43	18.425	22.317	43.673	1.00	44.21		C
ANISOU	1985	CG2	THR	B	43	5508	5690	5601	102	-45	42	C
ATOM	1986	N	PRO	B	44	20.487	21.096	46.087	1.00	44.05		N
ANISOU	1986	N	PRO	B	44	5599	5639	5501	20	7	-14	N
ATOM	1987	CA	PRO	B	44	20.749	21.675	47.387	1.00	42.79		C
ANISOU	1987	CA	PRO	B	44	5415	5444	5397	114	63	6	C
ATOM	1988	C	PRO	B	44	19.723	22.754	47.692	1.00	41.49		C
ANISOU	1988	C	PRO	B	44	5222	5476	5068	64	74	39	C
ATOM	1989	O	PRO	B	44	19.317	23.491	46.786	1.00	40.84		O
ANISOU	1989	O	PRO	B	44	5169	5295	5052	121	222	40	O
ATOM	1990	CB	PRO	B	44	22.131	22.311	47.261	1.00	43.55		C
ANISOU	1990	CB	PRO	B	44	5485	5581	5480	12	22	37	C
ATOM	1991	CG	PRO	B	44	22.775	21.623	46.095	1.00	44.15		C
ANISOU	1991	CG	PRO	B	44	5555	5630	5589	41	37	-29	C
ATOM	1992	CD	PRO	B	44	21.652	21.236	45.164	1.00	44.16		C
ANISOU	1992	CD	PRO	B	44	5583	5673	5521	28	12	8	C
ATOM	1993	N	LEU	B	45	19.382	22.927	48.968	1.00	39.39		N
ANISOU	1993	N	LEU	B	45	4979	5050	4937	141	-4	11	N
ATOM	1994	CA	LEU	B	45	18.420	23.958	49.355	1.00	37.24		C
ANISOU	1994	CA	LEU	B	45	4669	4982	4497	12	44	69	C
ATOM	1995	C	LEU	B	45	19.011	25.341	49.378	1.00	37.92		C

ANISOU	1995	C	LEU	B	45	4834	4960	4615	48	38	28	C
ATOM	1996	O	LEU	B	45	18.296	26.333	49.591	1.00	37.54		O
ANISOU	1996	O	LEU	B	45	4637	4940	4685	22	55	117	O
ATOM	1997	CB	LEU	B	45	17.848	23.550	50.738	1.00	36.06		C
ANISOU	1997	CB	LEU	B	45	4558	4675	4467	87	41	3	C
ATOM	1998	CG	LEU	B	45	17.069	22.234	50.710	1.00	35.04		C
ANISOU	1998	CG	LEU	B	45	4356	4630	4328	115	45	7	C
ATOM	1999	CD1	LEU	B	45	16.969	21.611	52.105	1.00	35.04		C
ANISOU	1999	CD1	LEU	B	45	4329	4589	4396	112	1	40	C
ATOM	2000	CD2	LEU	B	45	15.652	22.438	50.176	1.00	35.12		C
ANISOU	2000	CD2	LEU	B	45	4371	4602	4372	98	18	72	C
ATOM	2001	N	ARG	B	46	20.324	25.505	49.161	1.00	38.69		N
ANISOU	2001	N	ARG	B	46	4759	5158	4785	117	39	-5	N
ATOM	2002	CA	ARG	B	46	20.959	26.808	49.231	1.00	40.79		C
ANISOU	2002	CA	ARG	B	46	5198	5243	5058	-27	37	46	C
ATOM	2003	C	ARG	B	46	20.201	27.889	48.481	1.00	40.42		C
ANISOU	2003	C	ARG	B	46	4972	5268	5117	-57	67	60	C
ATOM	2004	O	ARG	B	46	19.854	28.912	49.078	1.00	40.21		O
ANISOU	2004	O	ARG	B	46	5052	5273	4953	-45	-38	113	O
ATOM	2005	CB	ARG	B	46	22.413	26.739	48.744	1.00	43.60		C
ANISOU	2005	CB	ARG	B	46	5272	5788	5504	94	33	25	C
ATOM	2006	CG	ARG	B	46	23.143	28.074	48.696	1.00	47.01		C
ANISOU	2006	CG	ARG	B	46	5940	5871	6050	-59	-84	38	C
ATOM	2007	CD	ARG	B	46	24.446	27.936	47.919	1.00	50.57		C
ANISOU	2007	CD	ARG	B	46	6281	6533	6399	66	146	0	C
ATOM	2008	NE	ARG	B	46	25.391	29.034	48.116	1.00	53.51		N
ANISOU	2008	NE	ARG	B	46	6766	6687	6879	-100	-6	-47	N
ATOM	2009	CZ	ARG	B	46	26.694	28.973	47.808	1.00	55.02		C
ANISOU	2009	CZ	ARG	B	46	6858	7009	7037	-16	60	-10	C
ATOM	2010	NH1	ARG	B	46	27.223	27.861	47.288	1.00	55.70		N
ANISOU	2010	NH1	ARG	B	46	7051	7039	7073	36	68	-9	N
ATOM	2011	NH2	ARG	B	46	27.513	30.001	48.013	1.00	55.33		N
ANISOU	2011	NH2	ARG	B	46	6921	7021	7079	-29	52	-25	N
ATOM	2012	N	ARG	B	47	19.918	27.668	47.196	1.00	40.88		N
ANISOU	2012	N	ARG	B	47	5065	5326	5141	-24	49	53	N
ATOM	2013	CA	ARG	B	47	19.268	28.683	46.366	1.00	41.72		C
ANISOU	2013	CA	ARG	B	47	5157	5397	5298	61	2	63	C
ATOM	2014	C	ARG	B	47	17.910	29.080	46.925	1.00	40.16		C
ANISOU	2014	C	ARG	B	47	5061	5228	4970	-33	-47	70	C
ATOM	2015	O	ARG	B	47	17.553	30.253	47.068	1.00	40.12		O
ANISOU	2015	O	ARG	B	47	4984	5230	5032	-53	-26	146	O
ATOM	2016	CB	ARG	B	47	19.150	28.197	44.918	1.00	44.11		C
ANISOU	2016	CB	ARG	B	47	5675	5648	5438	-10	-30	-33	C
ATOM	2017	CG	ARG	B	47	20.485	28.035	44.191	1.00	46.48		C
ANISOU	2017	CG	ARG	B	47	5763	6055	5843	24	48	-46	C
ATOM	2018	CD	ARG	B	47	20.918	29.350	43.566	1.00	49.08		C
ANISOU	2018	CD	ARG	B	47	6238	6175	6236	-46	95	60	C
ATOM	2019	NE	ARG	B	47	20.086	29.649	42.391	1.00	51.08		N
ANISOU	2019	NE	ARG	B	47	6421	6599	6386	-15	-45	-18	N
ATOM	2020	CZ	ARG	B	47	20.035	30.869	41.858	1.00	52.78		C
ANISOU	2020	CZ	ARG	B	47	6701	6658	6694	-20	6	38	C
ATOM	2021	NH1	ARG	B	47	20.751	31.839	42.427	1.00	53.44		N
ANISOU	2021	NH1	ARG	B	47	6795	6747	6764	-80	-8	-6	N
ATOM	2022	NH2	ARG	B	47	19.288	31.158	40.793	1.00	53.59		N
ANISOU	2022	NH2	ARG	B	47	6751	6903	6707	-38	-11	27	N
ATOM	2023	N	LEU	B	48	17.163	28.069	47.338	1.00	39.03		N
ANISOU	2023	N	LEU	B	48	4892	5095	4843	59	-62	-1	N
ATOM	2024	CA	LEU	B	48	15.844	28.266	47.966	1.00	38.40		C
ANISOU	2024	CA	LEU	B	48	4919	4986	4684	3	-39	4	C
ATOM	2025	C	LEU	B	48	15.929	29.136	49.206	1.00	35.83		C
ANISOU	2025	C	LEU	B	48	4434	4674	4505	72	25	129	C
ATOM	2026	O	LEU	B	48	15.225	30.127	49.423	1.00	33.87		O
ANISOU	2026	O	LEU	B	48	4272	4582	4015	-30	149	170	O
ATOM	2027	CB	LEU	B	48	15.423	26.831	48.250	1.00	40.15		C

ANISOU	2027	CB	LEU	B	48	5145	5048	5061	-62	-38	7	C
ATOM	2028	CG	LEU	B	48	14.111	26.471	48.907	1.00	40.86		C
ANISOU	2028	CG	LEU	B	48	5187	5210	5127	-14	-3	7	C
ATOM	2029	CD1	LEU	B	48	13.755	25.033	48.540	1.00	40.98		C
ANISOU	2029	CD1	LEU	B	48	5215	5184	5173	-5	-20	18	C
ATOM	2030	CD2	LEU	B	48	14.216	26.648	50.412	1.00	40.80		C
ANISOU	2030	CD2	LEU	B	48	5218	5156	5129	2	-1	11	C
ATOM	2031	N	MET	B	49	16.874	28.814	50.092	1.00	34.39		N
ANISOU	2031	N	MET	B	49	4319	4518	4228	8	119	80	N
ATOM	2032	CA	MET	B	49	17.116	29.539	51.333	1.00	34.12		C
ANISOU	2032	CA	MET	B	49	4276	4389	4299	-3	51	69	C
ATOM	2033	C	MET	B	49	17.583	30.969	51.101	1.00	34.71		C
ANISOU	2033	C	MET	B	49	4408	4407	4372	-6	-55	88	C
ATOM	2034	O	MET	B	49	17.141	31.906	51.768	1.00	35.24		O
ANISOU	2034	O	MET	B	49	4471	4591	4326	-68	-36	10	O
ATOM	2035	CB	MET	B	49	18.151	28.776	52.170	1.00	33.93		C
ANISOU	2035	CB	MET	B	49	4280	4423	4188	-17	33	32	C
ATOM	2036	CG	MET	B	49	17.684	27.370	52.538	1.00	34.25		C
ANISOU	2036	CG	MET	B	49	4399	4404	4211	7	28	64	C
ATOM	2037	SD	MET	B	49	19.052	26.281	53.024	1.00	34.57		S
ANISOU	2037	SD	MET	B	49	4685	4519	3929	117	-48	74	S
ATOM	2038	CE	MET	B	49	19.657	27.098	54.499	1.00	33.51		C
ANISOU	2038	CE	MET	B	49	4492	4149	4091	7	-7	53	C
ATOM	2039	N	GLU	B	50	18.483	31.134	50.133	1.00	35.37		N
ANISOU	2039	N	GLU	B	50	4373	4612	4455	-5	-43	48	N
ATOM	2040	CA	GLU	B	50	18.973	32.483	49.819	1.00	37.33		C
ANISOU	2040	CA	GLU	B	50	4760	4685	4738	-32	39	142	C
ATOM	2041	C	GLU	B	50	17.862	33.318	49.214	1.00	36.13		C
ANISOU	2041	C	GLU	B	50	4613	4705	4408	-96	126	158	C
ATOM	2042	O	GLU	B	50	17.652	34.472	49.616	1.00	36.27		O
ANISOU	2042	O	GLU	B	50	4673	4633	4475	-69	30	282	O
ATOM	2043	CB	GLU	B	50	20.220	32.371	48.938	1.00	40.63		C
ANISOU	2043	CB	GLU	B	50	5035	5254	5147	-23	223	27	C
ATOM	2044	CG	GLU	B	50	21.395	31.710	49.659	1.00	43.80		C
ANISOU	2044	CG	GLU	B	50	5464	5582	5594	62	-106	117	C
ATOM	2045	CD	GLU	B	50	22.628	31.649	48.780	1.00	46.59		C
ANISOU	2045	CD	GLU	B	50	5800	6013	5887	62	103	17	C
ATOM	2046	OE1	GLU	B	50	22.525	32.069	47.599	1.00	48.10		O
ANISOU	2046	OE1	GLU	B	50	6083	6229	5963	98	32	65	O
ATOM	2047	OE2	GLU	B	50	23.706	31.205	49.241	1.00	47.29		O
ANISOU	2047	OE2	GLU	B	50	5930	6049	5988	96	-1	66	O
ATOM	2048	N	ALA	B	51	17.014	32.728	48.391	1.00	36.59		N
ANISOU	2048	N	ALA	B	51	4741	4700	4461	-48	100	92	N
ATOM	2049	CA	ALA	B	51	15.878	33.424	47.783	1.00	36.88		C
ANISOU	2049	CA	ALA	B	51	4770	4707	4537	-17	34	75	C
ATOM	2050	C	ALA	B	51	14.925	33.921	48.856	1.00	37.40		C
ANISOU	2050	C	ALA	B	51	4718	4807	4687	0	88	107	C
ATOM	2051	O	ALA	B	51	14.507	35.084	48.874	1.00	37.53		O
ANISOU	2051	O	ALA	B	51	4832	4823	4606	-26	115	218	O
ATOM	2052	CB	ALA	B	51	15.153	32.517	46.806	1.00	37.13		C
ANISOU	2052	CB	ALA	B	51	4688	4770	4650	-54	5	78	C
ATOM	2053	N	PHE	B	52	14.601	33.017	49.800	1.00	37.58		N
ANISOU	2053	N	PHE	B	52	4743	4831	4705	26	62	139	N
ATOM	2054	CA	PHE	B	52	13.743	33.419	50.902	1.00	36.93		C
ANISOU	2054	CA	PHE	B	52	4690	4678	4664	30	40	154	C
ATOM	2055	C	PHE	B	52	14.340	34.569	51.694	1.00	37.67		C
ANISOU	2055	C	PHE	B	52	4818	4750	4744	-48	48	146	C
ATOM	2056	O	PHE	B	52	13.624	35.538	51.975	1.00	38.33		O
ANISOU	2056	O	PHE	B	52	4861	4778	4924	11	13	161	O
ATOM	2057	CB	PHE	B	52	13.465	32.237	51.841	1.00	35.85		C
ANISOU	2057	CB	PHE	B	52	4469	4592	4561	-1	42	52	C
ATOM	2058	CG	PHE	B	52	12.426	32.613	52.870	1.00	35.18		C
ANISOU	2058	CG	PHE	B	52	4457	4478	4431	-25	-1	28	C
ATOM	2059	CD1	PHE	B	52	11.084	32.470	52.572	1.00	35.08		C

ANISOU	2059	CD1	PHE	B	52	4447	4503	4380	7	-25	29	C
ATOM	2060	CD2	PHE	B	52	12.780	33.118	54.107	1.00	34.44		C
ANISOU	2060	CD2	PHE	B	52	4289	4369	4427	-32	-34	47	C
ATOM	2061	CE1	PHE	B	52	10.112	32.806	53.487	1.00	34.97		C
ANISOU	2061	CE1	PHE	B	52	4508	4384	4394	13	5	26	C
ATOM	2062	CE2	PHE	B	52	11.797	33.479	55.018	1.00	34.48		C
ANISOU	2062	CE2	PHE	B	52	4399	4372	4328	-28	-33	46	C
ATOM	2063	CZ	PHE	B	52	10.467	33.323	54.709	1.00	34.37		C
ANISOU	2063	CZ	PHE	B	52	4434	4265	4361	-14	-1	92	C
ATOM	2064	N	ALA	B	53	15.604	34.495	52.090	1.00	38.42		N
ANISOU	2064	N	ALA	B	53	4863	4808	4926	32	12	237	N
ATOM	2065	CA	ALA	B	53	16.237	35.536	52.894	1.00	39.93		C
ANISOU	2065	CA	ALA	B	53	5008	5046	5119	-34	19	72	C
ATOM	2066	C	ALA	B	53	16.258	36.900	52.208	1.00	41.09		C
ANISOU	2066	C	ALA	B	53	5200	5056	5356	-12	16	88	C
ATOM	2067	O	ALA	B	53	15.906	37.943	52.769	1.00	40.06		O
ANISOU	2067	O	ALA	B	53	5088	4979	5154	-216	149	133	O
ATOM	2068	CB	ALA	B	53	17.677	35.102	53.193	1.00	40.13		C
ANISOU	2068	CB	ALA	B	53	5088	5003	5155	11	-30	134	C
ATOM	2069	N	LYS	B	54	16.643	36.878	50.936	1.00	43.57		N
ANISOU	2069	N	LYS	B	54	5528	5564	5465	-12	77	36	N
ATOM	2070	CA	LYS	B	54	16.728	38.069	50.089	1.00	45.45		C
ANISOU	2070	CA	LYS	B	54	5911	5644	5712	-37	19	96	C
ATOM	2071	C	LYS	B	54	15.370	38.753	50.048	1.00	47.50		C
ANISOU	2071	C	LYS	B	54	6043	6021	5983	98	25	77	C
ATOM	2072	O	LYS	B	54	15.272	39.951	50.325	1.00	47.24		O
ANISOU	2072	O	LYS	B	54	5943	6011	5997	33	6	76	O
ATOM	2073	CB	LYS	B	54	17.191	37.688	48.700	1.00	45.58		C
ANISOU	2073	CB	LYS	B	54	5829	5754	5737	-27	43	75	C
ATOM	2074	N	ARG	B	55	14.302	37.984	49.836	1.00	49.68		N
ANISOU	2074	N	ARG	B	55	6363	6251	6261	-87	-40	45	N
ATOM	2075	CA	ARG	B	55	12.965	38.572	49.877	1.00	51.93		C
ANISOU	2075	CA	ARG	B	55	6546	6594	6589	90	13	57	C
ATOM	2076	C	ARG	B	55	12.618	39.243	51.196	1.00	52.04		C
ANISOU	2076	C	ARG	B	55	6571	6574	6625	10	30	23	C
ATOM	2077	O	ARG	B	55	11.855	40.222	51.179	1.00	51.46		O
ANISOU	2077	O	ARG	B	55	6615	6515	6424	1	-10	63	O
ATOM	2078	CB	ARG	B	55	11.887	37.564	49.499	1.00	54.25		C
ANISOU	2078	CB	ARG	B	55	6811	6778	7022	-70	25	11	C
ATOM	2079	CG	ARG	B	55	11.502	37.719	48.028	1.00	57.16		C
ANISOU	2079	CG	ARG	B	55	7336	7253	7127	-23	-30	20	C
ATOM	2080	CD	ARG	B	55	9.984	37.592	47.893	1.00	59.38		C
ANISOU	2080	CD	ARG	B	55	7398	7582	7583	-3	-5	61	C
ATOM	2081	NE	ARG	B	55	9.710	36.806	46.692	1.00	61.03		N
ANISOU	2081	NE	ARG	B	55	7771	7742	7674	12	-24	-10	N
ATOM	2082	CZ	ARG	B	55	8.543	36.267	46.382	1.00	62.13		C
ANISOU	2082	CZ	ARG	B	55	7830	7885	7892	-34	-52	26	C
ATOM	2083	NH1	ARG	B	55	7.503	36.433	47.191	1.00	62.74		N
ANISOU	2083	NH1	ARG	B	55	7936	7955	7948	24	-5	19	N
ATOM	2084	NH2	ARG	B	55	8.461	35.570	45.256	1.00	62.58		N
ANISOU	2084	NH2	ARG	B	55	7907	7940	7929	-12	2	-10	N
ATOM	2085	N	GLN	B	56	13.149	38.796	52.333	1.00	52.31		N
ANISOU	2085	N	GLN	B	56	6603	6578	6693	46	0	58	N
ATOM	2086	CA	GLN	B	56	12.893	39.457	53.600	1.00	53.36		C
ANISOU	2086	CA	GLN	B	56	6781	6761	6734	53	-13	16	C
ATOM	2087	C	GLN	B	56	13.927	40.547	53.850	1.00	53.81		C
ANISOU	2087	C	GLN	B	56	6817	6773	6855	47	-41	44	C
ATOM	2088	O	GLN	B	56	13.934	41.194	54.894	1.00	54.10		O
ANISOU	2088	O	GLN	B	56	6871	6810	6874	33	-32	32	O
ATOM	2089	CB	GLN	B	56	12.924	38.482	54.781	1.00	53.69		C
ANISOU	2089	CB	GLN	B	56	6799	6802	6799	44	-3	50	C
ATOM	2090	CG	GLN	B	56	12.304	37.127	54.536	1.00	54.05		C
ANISOU	2090	CG	GLN	B	56	6863	6836	6838	-1	21	23	C
ATOM	2091	CD	GLN	B	56	10.941	37.214	53.878	1.00	54.55		C

ANISOU	2091	CD	GLN	B	56	6915	6923	6888	5	-8	24	C
ATOM	2092	OE1	GLN	B	56	10.150	38.109	54.195	1.00	55.10		O
ANISOU	2092	OE1	GLN	B	56	6998	6968	6969	38	4	1	O
ATOM	2093	NE2	GLN	B	56	10.690	36.309	52.944	1.00	54.32		N
ANISOU	2093	NE2	GLN	B	56	6879	6860	6901	5	6	28	N
ATOM	2094	N	GLY	B	57	14.899	40.680	52.958	1.00	54.34		N
ANISOU	2094	N	GLY	B	57	6876	6886	6885	69	-26	51	N
ATOM	2095	CA	GLY	B	57	15.988	41.638	53.073	1.00	55.13		C
ANISOU	2095	CA	GLY	B	57	6995	6945	7008	-2	-5	16	C
ATOM	2096	C	GLY	B	57	16.907	41.276	54.241	1.00	55.51		C
ANISOU	2096	C	GLY	B	57	7060	7008	7025	14	-22	39	C
ATOM	2097	O	GLY	B	57	17.584	42.131	54.812	1.00	56.13		O
ANISOU	2097	O	GLY	B	57	7178	7006	7144	-24	-9	40	O
ATOM	2098	N	LYS	B	58	16.933	39.999	54.615	1.00	55.18		N
ANISOU	2098	N	LYS	B	58	7016	6970	6980	27	-38	3	N
ATOM	2099	CA	LYS	B	58	17.696	39.522	55.748	1.00	54.66		C
ANISOU	2099	CA	LYS	B	58	6942	6883	6941	16	-10	-22	C
ATOM	2100	C	LYS	B	58	18.916	38.715	55.326	1.00	53.98		C
ANISOU	2100	C	LYS	B	58	6864	6793	6851	-26	-23	41	C
ATOM	2101	O	LYS	B	58	18.947	38.065	54.287	1.00	53.68		O
ANISOU	2101	O	LYS	B	58	6841	6721	6833	-11	-11	67	O
ATOM	2102	CB	LYS	B	58	16.824	38.670	56.683	1.00	55.17		C
ANISOU	2102	CB	LYS	B	58	6977	7015	6972	-15	-29	45	C
ATOM	2103	CG	LYS	B	58	15.946	39.522	57.589	1.00	56.18		C
ANISOU	2103	CG	LYS	B	58	7104	7131	7110	30	9	-5	C
ATOM	2104	CD	LYS	B	58	14.899	38.691	58.321	1.00	56.75		C
ANISOU	2104	CD	LYS	B	58	7176	7201	7188	-20	18	14	C
ATOM	2105	CE	LYS	B	58	13.769	39.572	58.836	1.00	56.84		C
ANISOU	2105	CE	LYS	B	58	7180	7227	7190	-2	-2	4	C
ATOM	2106	NZ	LYS	B	58	12.753	38.784	59.589	1.00	56.81		N
ANISOU	2106	NZ	LYS	B	58	7186	7209	7191	-18	-19	-2	N
ATOM	2107	N	GLU	B	59	19.912	38.785	56.202	1.00	53.55		N
ANISOU	2107	N	GLU	B	59	6802	6702	6841	3	12	26	N
ATOM	2108	CA	GLU	B	59	21.151	38.052	55.964	1.00	53.20		C
ANISOU	2108	CA	GLU	B	59	6759	6698	6756	-25	1	31	C
ATOM	2109	C	GLU	B	59	20.927	36.584	56.321	1.00	52.61		C
ANISOU	2109	C	GLU	B	59	6645	6654	6691	-3	-5	-6	C
ATOM	2110	O	GLU	B	59	20.245	36.249	57.290	1.00	52.52		O
ANISOU	2110	O	GLU	B	59	6593	6603	6758	-72	-14	-7	O
ATOM	2111	CB	GLU	B	59	22.275	38.670	56.777	1.00	53.05		C
ANISOU	2111	CB	GLU	B	59	6720	6688	6749	7	16	6	C
ATOM	2112	N	MET	B	60	21.545	35.709	55.554	1.00	51.89		N
ANISOU	2112	N	MET	B	60	6548	6588	6579	-25	-23	35	N
ATOM	2113	CA	MET	B	60	21.509	34.279	55.744	1.00	51.70		C
ANISOU	2113	CA	MET	B	60	6527	6576	6539	-31	13	-12	C
ATOM	2114	C	MET	B	60	22.019	33.785	57.084	1.00	52.12		C
ANISOU	2114	C	MET	B	60	6605	6602	6595	-25	-14	22	C
ATOM	2115	O	MET	B	60	21.512	32.787	57.592	1.00	52.65		O
ANISOU	2115	O	MET	B	60	6718	6658	6629	-47	65	38	O
ATOM	2116	CB	MET	B	60	22.430	33.652	54.674	1.00	50.92		C
ANISOU	2116	CB	MET	B	60	6441	6458	6448	-53	-52	-12	C
ATOM	2117	CG	MET	B	60	21.681	33.554	53.340	1.00	49.61		C
ANISOU	2117	CG	MET	B	60	6237	6262	6349	-104	32	22	C
ATOM	2118	SD	MET	B	60	20.383	32.315	53.571	1.00	47.67		S
ANISOU	2118	SD	MET	B	60	6200	6065	5846	-53	88	25	S
ATOM	2119	CE	MET	B	60	21.295	30.826	53.148	1.00	47.57		C
ANISOU	2119	CE	MET	B	60	5978	6078	6017	-47	-1	38	C
ATOM	2120	N	ASP	B	61	23.008	34.447	57.670	1.00	51.70		N
ANISOU	2120	N	ASP	B	61	6571	6566	6506	3	-16	42	N
ATOM	2121	CA	ASP	B	61	23.620	34.033	58.924	1.00	51.25		C
ANISOU	2121	CA	ASP	B	61	6528	6495	6450	39	41	-6	C
ATOM	2122	C	ASP	B	61	22.831	34.462	60.151	1.00	49.03		C
ANISOU	2122	C	ASP	B	61	6135	6161	6334	4	-53	87	C
ATOM	2123	O	ASP	B	61	23.231	34.204	61.290	1.00	49.30		O

ANISOU	2123	O	ASP	B	61	6278	6190	6265	-37	-4	52	O
ATOM	2124	CB	ASP	B	61	25.069	34.545	58.999	1.00	53.17		C
ANISOU	2124	CB	ASP	B	61	6602	6824	6775	-24	-17	31	C
ATOM	2125	CG	ASP	B	61	25.258	36.036	59.112	1.00	54.52		C
ANISOU	2125	CG	ASP	B	61	6875	6880	6959	-36	-7	14	C
ATOM	2126	OD1	ASP	B	61	24.273	36.810	59.043	1.00	55.35		O
ANISOU	2126	OD1	ASP	B	61	6932	6971	7126	7	-25	47	O
ATOM	2127	OD2	ASP	B	61	26.412	36.510	59.285	1.00	55.04		O
ANISOU	2127	OD2	ASP	B	61	6826	7093	6996	-10	4	64	O
ATOM	2128	N	SER	B	62	21.732	35.163	59.923	1.00	46.10		N
ANISOU	2128	N	SER	B	62	5834	5852	5830	-146	113	15	N
ATOM	2129	CA	SER	B	62	20.838	35.649	60.948	1.00	43.53		C
ANISOU	2129	CA	SER	B	62	5380	5499	5660	-192	-71	67	C
ATOM	2130	C	SER	B	62	19.565	34.787	60.955	1.00	39.77		C
ANISOU	2130	C	SER	B	62	5122	4983	5004	38	-49	50	C
ATOM	2131	O	SER	B	62	18.728	35.038	61.816	1.00	38.68		O
ANISOU	2131	O	SER	B	62	4909	4953	4834	-66	-104	243	O
ATOM	2132	CB	SER	B	62	20.446	37.109	60.705	1.00	45.00		C
ANISOU	2132	CB	SER	B	62	5683	5603	5811	-42	3	59	C
ATOM	2133	OG	SER	B	62	19.630	37.220	59.536	1.00	47.01		O
ANISOU	2133	OG	SER	B	62	6007	5955	5900	-19	-100	81	O
ATOM	2134	N	LEU	B	63	19.450	33.905	59.967	1.00	36.26		N
ANISOU	2134	N	LEU	B	63	4488	4427	4862	-86	-40	304	N
ATOM	2135	CA	LEU	B	63	18.258	33.067	59.870	1.00	33.71		C
ANISOU	2135	CA	LEU	B	63	4289	4044	4475	62	18	165	C
ATOM	2136	C	LEU	B	63	18.609	31.578	59.971	1.00	31.59		C
ANISOU	2136	C	LEU	B	63	3950	3949	4104	-55	90	280	C
ATOM	2137	O	LEU	B	63	19.568	31.099	59.371	1.00	31.78		O
ANISOU	2137	O	LEU	B	63	4105	3811	4158	22	160	417	O
ATOM	2138	CB	LEU	B	63	17.522	33.173	58.529	1.00	34.61		C
ANISOU	2138	CB	LEU	B	63	4385	4316	4448	26	33	98	C
ATOM	2139	CG	LEU	B	63	16.682	34.423	58.257	1.00	35.54		C
ANISOU	2139	CG	LEU	B	63	4540	4433	4530	127	-34	78	C
ATOM	2140	CD1	LEU	B	63	16.227	34.429	56.803	1.00	35.42		C
ANISOU	2140	CD1	LEU	B	63	4525	4436	4498	70	-11	53	C
ATOM	2141	CD2	LEU	B	63	15.482	34.503	59.180	1.00	35.92		C
ANISOU	2141	CD2	LEU	B	63	4568	4534	4546	14	-12	126	C
ATOM	2142	N	ARG	B	64	17.816	30.831	60.730	1.00	28.52		N
ANISOU	2142	N	ARG	B	64	3433	3671	3733	-28	-93	74	N
ATOM	2143	CA	ARG	B	64	18.010	29.398	60.822	1.00	25.81		C
ANISOU	2143	CA	ARG	B	64	3105	3587	3114	19	-14	56	C
ATOM	2144	C	ARG	B	64	16.848	28.717	60.090	1.00	26.11		C
ANISOU	2144	C	ARG	B	64	3216	3542	3163	33	-1	-39	C
ATOM	2145	O	ARG	B	64	15.688	29.012	60.406	1.00	27.40		O
ANISOU	2145	O	ARG	B	64	3283	3730	3399	19	-51	-117	O
ATOM	2146	CB	ARG	B	64	17.989	28.920	62.295	1.00	26.53		C
ANISOU	2146	CB	ARG	B	64	3394	3612	3073	-34	23	60	C
ATOM	2147	CG	ARG	B	64	18.821	29.807	63.229	1.00	26.50		C
ANISOU	2147	CG	ARG	B	64	3533	3550	2984	-32	2	113	C
ATOM	2148	CD	ARG	B	64	20.293	29.729	62.903	1.00	27.50		C
ANISOU	2148	CD	ARG	B	64	3535	3681	3234	-126	-63	134	C
ATOM	2149	NE	ARG	B	64	21.105	30.383	63.937	1.00	27.46		N
ANISOU	2149	NE	ARG	B	64	3606	3654	3173	-64	-109	200	N
ATOM	2150	CZ	ARG	B	64	21.834	31.451	63.767	1.00	27.33		C
ANISOU	2150	CZ	ARG	B	64	3492	3567	3325	-93	-116	60	C
ATOM	2151	NH1	ARG	B	64	21.926	32.034	62.561	1.00	29.19		N
ANISOU	2151	NH1	ARG	B	64	3723	3917	3453	-188	17	196	N
ATOM	2152	NH2	ARG	B	64	22.509	31.932	64.798	1.00	26.04		N
ANISOU	2152	NH2	ARG	B	64	3462	3343	3088	73	-45	219	N
ATOM	2153	N	PHE	B	65	17.150	27.845	59.156	1.00	24.96		N
ANISOU	2153	N	PHE	B	65	3251	3243	2990	14	-85	64	N
ATOM	2154	CA	PHE	B	65	16.116	27.166	58.385	1.00	25.66		C
ANISOU	2154	CA	PHE	B	65	3183	3370	3197	-48	1	93	C
ATOM	2155	C	PHE	B	65	15.971	25.753	58.935	1.00	25.10		C

ANISOU	2155	C	PHE	B	65	3260	3368	2909	-7	-5	87	C
ATOM	2156	O	PHE	B	65	16.918	24.959	58.899	1.00	25.00		O
ANISOU	2156	O	PHE	B	65	3165	3822	2513	70	148	188	O
ATOM	2157	CB	PHE	B	65	16.467	27.129	56.892	1.00	27.19		C
ANISOU	2157	CB	PHE	B	65	3405	3704	3222	30	21	-8	C
ATOM	2158	CG	PHE	B	65	16.501	28.473	56.236	1.00	29.68		C
ANISOU	2158	CG	PHE	B	65	3870	3847	3558	2	8	92	C
ATOM	2159	CD1	PHE	B	65	17.643	29.247	56.227	1.00	30.70		C
ANISOU	2159	CD1	PHE	B	65	3780	3994	3889	-17	-18	3	C
ATOM	2160	CD2	PHE	B	65	15.366	28.933	55.565	1.00	30.32		C
ANISOU	2160	CD2	PHE	B	65	3722	3977	3823	50	50	55	C
ATOM	2161	CE1	PHE	B	65	17.645	30.478	55.601	1.00	31.72		C
ANISOU	2161	CE1	PHE	B	65	3904	4119	4030	-64	34	119	C
ATOM	2162	CE2	PHE	B	65	15.369	30.171	54.941	1.00	31.21		C
ANISOU	2162	CE2	PHE	B	65	3981	4020	3859	-30	-13	63	C
ATOM	2163	CZ	PHE	B	65	16.518	30.945	54.947	1.00	31.82		C
ANISOU	2163	CZ	PHE	B	65	4038	4097	3956	-43	-27	62	C
ATOM	2164	N	LEU	B	66	14.805	25.470	59.517	1.00	24.98		N
ANISOU	2164	N	LEU	B	66	3149	3442	2899	96	-32	17	N
ATOM	2165	CA	LEU	B	66	14.597	24.165	60.144	1.00	25.89		C
ANISOU	2165	CA	LEU	B	66	3215	3385	3239	-43	-104	-26	C
ATOM	2166	C	LEU	B	66	13.529	23.314	59.446	1.00	26.86		C
ANISOU	2166	C	LEU	B	66	3401	3441	3366	11	-94	-46	C
ATOM	2167	O	LEU	B	66	12.525	23.841	58.991	1.00	25.08		O
ANISOU	2167	O	LEU	B	66	3185	3287	3056	168	90	32	O
ATOM	2168	CB	LEU	B	66	14.094	24.367	61.583	1.00	27.45		C
ANISOU	2168	CB	LEU	B	66	3450	3620	3359	-57	33	12	C
ATOM	2169	CG	LEU	B	66	14.853	25.302	62.513	1.00	28.71		C
ANISOU	2169	CG	LEU	B	66	3449	3948	3512	-73	-71	-65	C
ATOM	2170	CD1	LEU	B	66	14.350	25.151	63.959	1.00	29.40		C
ANISOU	2170	CD1	LEU	B	66	3581	3947	3641	-168	134	-118	C
ATOM	2171	CD2	LEU	B	66	16.353	25.078	62.517	1.00	28.52		C
ANISOU	2171	CD2	LEU	B	66	3518	3884	3435	90	-10	-5	C
ATOM	2172	N	TYR	B	67	13.776	22.012	59.487	1.00	26.50		N
ANISOU	2172	N	TYR	B	67	3492	3391	3184	-11	32	-14	N
ATOM	2173	CA	TYR	B	67	12.813	21.076	58.923	1.00	27.08		C
ANISOU	2173	CA	TYR	B	67	3458	3523	3306	-66	6	-29	C
ATOM	2174	C	TYR	B	67	12.511	20.057	60.012	1.00	25.68		C
ANISOU	2174	C	TYR	B	67	3271	3392	3096	-78	-94	-146	C
ATOM	2175	O	TYR	B	67	13.345	19.256	60.402	1.00	24.58		O
ANISOU	2175	O	TYR	B	67	3156	3434	2748	-63	55	-352	O
ATOM	2176	CB	TYR	B	67	13.360	20.413	57.648	1.00	28.18		C
ANISOU	2176	CB	TYR	B	67	3622	3669	3416	30	83	-76	C
ATOM	2177	CG	TYR	B	67	12.490	19.221	57.259	1.00	28.18		C
ANISOU	2177	CG	TYR	B	67	3741	3612	3353	12	110	-29	C
ATOM	2178	CD1	TYR	B	67	11.175	19.433	56.866	1.00	28.95		C
ANISOU	2178	CD1	TYR	B	67	3756	3712	3532	-84	35	-42	C
ATOM	2179	CD2	TYR	B	67	12.989	17.925	57.312	1.00	27.79		C
ANISOU	2179	CD2	TYR	B	67	3770	3595	3195	3	78	49	C
ATOM	2180	CE1	TYR	B	67	10.352	18.367	56.521	1.00	29.96		C
ANISOU	2180	CE1	TYR	B	67	4031	3710	3643	-82	-40	-93	C
ATOM	2181	CE2	TYR	B	67	12.179	16.855	56.979	1.00	29.12		C
ANISOU	2181	CE2	TYR	B	67	3882	3755	3428	-85	41	11	C
ATOM	2182	CZ	TYR	B	67	10.879	17.091	56.599	1.00	29.69		C
ANISOU	2182	CZ	TYR	B	67	3880	3765	3635	-19	-29	15	C
ATOM	2183	OH	TYR	B	67	10.053	16.050	56.259	1.00	32.14		O
ANISOU	2183	OH	TYR	B	67	4228	3907	4076	-207	-125	-40	O
ATOM	2184	N	ASP	B	68	11.328	20.184	60.624	1.00	25.56		N
ANISOU	2184	N	ASP	B	68	3323	3377	3013	-64	-85	-220	N
ATOM	2185	CA	ASP	B	68	10.923	19.276	61.701	1.00	27.04		C
ANISOU	2185	CA	ASP	B	68	3416	3539	3318	-89	-189	-6	C
ATOM	2186	C	ASP	B	68	11.935	19.318	62.854	1.00	25.55		C
ANISOU	2186	C	ASP	B	68	3276	3275	3155	-13	-99	12	C
ATOM	2187	O	ASP	B	68	12.308	18.287	63.430	1.00	24.29		O

ANISOU	2187	O	ASP	B	68	2889	3283	3057	-89	-100	81	O
ATOM	2188	CB	ASP	B	68	10.787	17.846	61.173	1.00	29.17		C
ANISOU	2188	CB	ASP	B	68	3729	3609	3746	2	-118	-136	C
ATOM	2189	CG	ASP	B	68	9.492	17.622	60.395	1.00	31.97		C
ANISOU	2189	CG	ASP	B	68	3862	4198	4086	-31	-185	-96	C
ATOM	2190	OD1	ASP	B	68	8.669	18.547	60.309	1.00	31.80		O
ANISOU	2190	OD1	ASP	B	68	4010	4054	4019	-47	-294	-70	O
ATOM	2191	OD2	ASP	B	68	9.343	16.483	59.886	1.00	33.94		O
ANISOU	2191	OD2	ASP	B	68	4243	4375	4279	-212	-207	-225	O
ATOM	2192	N	GLY	B	69	12.460	20.510	63.090	1.00	24.44		N
ANISOU	2192	N	GLY	B	69	3073	3243	2968	-80	-149	62	N
ATOM	2193	CA	GLY	B	69	13.428	20.760	64.143	1.00	23.71		C
ANISOU	2193	CA	GLY	B	69	3004	3167	2839	112	-78	-53	C
ATOM	2194	C	GLY	B	69	14.873	20.590	63.761	1.00	23.88		C
ANISOU	2194	C	GLY	B	69	2884	3229	2962	-103	-124	-147	C
ATOM	2195	O	GLY	B	69	15.755	20.896	64.594	1.00	24.06		O
ANISOU	2195	O	GLY	B	69	2885	3344	2914	186	-167	-406	O
ATOM	2196	N	ILE	B	70	15.170	20.055	62.592	1.00	23.99		N
ANISOU	2196	N	ILE	B	70	2900	3280	2936	-39	-44	-185	N
ATOM	2197	CA	ILE	B	70	16.563	19.855	62.146	1.00	25.40		C
ANISOU	2197	CA	ILE	B	70	3104	3353	3194	-34	8	-114	C
ATOM	2198	C	ILE	B	70	17.077	21.096	61.443	1.00	25.08		C
ANISOU	2198	C	ILE	B	70	2947	3416	3167	-13	-60	2	C
ATOM	2199	O	ILE	B	70	16.453	21.601	60.493	1.00	24.99		O
ANISOU	2199	O	ILE	B	70	2896	3652	2949	-181	-243	-174	O
ATOM	2200	CB	ILE	B	70	16.623	18.674	61.143	1.00	26.14		C
ANISOU	2200	CB	ILE	B	70	3251	3398	3282	58	108	-158	C
ATOM	2201	CG1	ILE	B	70	16.156	17.377	61.801	1.00	27.39		C
ANISOU	2201	CG1	ILE	B	70	3550	3439	3417	39	14	-133	C
ATOM	2202	CG2	ILE	B	70	18.054	18.550	60.587	1.00	25.18		C
ANISOU	2202	CG2	ILE	B	70	3176	3286	3105	180	-12	-222	C
ATOM	2203	CD1	ILE	B	70	15.876	16.352	60.695	1.00	28.46		C
ANISOU	2203	CD1	ILE	B	70	3730	3619	3462	7	7	-215	C
ATOM	2204	N	ARG	B	71	18.229	21.606	61.881	1.00	23.27		N
ANISOU	2204	N	ARG	B	71	2979	2921	2943	12	-39	-168	N
ATOM	2205	CA	ARG	B	71	18.819	22.806	61.317	1.00	25.13		C
ANISOU	2205	CA	ARG	B	71	3253	3205	3091	-57	-37	-42	C
ATOM	2206	C	ARG	B	71	19.495	22.455	59.998	1.00	26.72		C
ANISOU	2206	C	ARG	B	71	3226	3613	3314	-28	150	8	C
ATOM	2207	O	ARG	B	71	20.522	21.782	59.974	1.00	27.96		O
ANISOU	2207	O	ARG	B	71	3497	3836	3291	231	-78	-32	O
ATOM	2208	CB	ARG	B	71	19.868	23.329	62.302	1.00	24.76		C
ANISOU	2208	CB	ARG	B	71	3195	3105	3109	-10	-99	2	C
ATOM	2209	CG	ARG	B	71	20.440	24.691	61.899	1.00	25.29		C
ANISOU	2209	CG	ARG	B	71	3258	3194	3159	-82	44	-72	C
ATOM	2210	CD	ARG	B	71	21.710	24.989	62.720	1.00	26.18		C
ANISOU	2210	CD	ARG	B	71	3244	3466	3238	-64	-10	-74	C
ATOM	2211	NE	ARG	B	71	21.245	25.193	64.120	1.00	26.72		N
ANISOU	2211	NE	ARG	B	71	3435	3475	3244	80	-3	-111	N
ATOM	2212	CZ	ARG	B	71	21.488	26.324	64.774	1.00	26.12		C
ANISOU	2212	CZ	ARG	B	71	3232	3521	3173	32	-2	-72	C
ATOM	2213	NH1	ARG	B	71	22.159	27.310	64.198	1.00	27.62		N
ANISOU	2213	NH1	ARG	B	71	3751	3409	3336	-10	-90	20	N
ATOM	2214	NH2	ARG	B	71	21.009	26.447	66.019	1.00	24.03		N
ANISOU	2214	NH2	ARG	B	71	3088	3164	2879	212	-289	-99	N
ATOM	2215	N	ILE	B	72	18.888	22.889	58.917	1.00	27.53		N
ANISOU	2215	N	ILE	B	72	3315	3727	3418	6	71	57	N
ATOM	2216	CA	ILE	B	72	19.378	22.637	57.571	1.00	28.63		C
ANISOU	2216	CA	ILE	B	72	3465	3869	3542	84	92	-7	C
ATOM	2217	C	ILE	B	72	20.679	23.392	57.304	1.00	30.30		C
ANISOU	2217	C	ILE	B	72	3693	3999	3819	-34	73	45	C
ATOM	2218	O	ILE	B	72	20.893	24.548	57.640	1.00	29.09		O
ANISOU	2218	O	ILE	B	72	3254	3987	3811	24	185	70	O
ATOM	2219	CB	ILE	B	72	18.333	23.078	56.537	1.00	29.16		C

ANISOU	2219	CB	ILE	B	72	3555	3934	3592	-32	10	44	C
ATOM	2220	CG1	ILE	B	72	17.010	22.329	56.770	1.00	28.08		C
ANISOU	2220	CG1	ILE	B	72	3377	3804	3489	20	-65	29	C
ATOM	2221	CG2	ILE	B	72	18.784	22.783	55.120	1.00	29.87		C
ANISOU	2221	CG2	ILE	B	72	3734	4025	3590	121	-2	6	C
ATOM	2222	CD1	ILE	B	72	15.864	23.035	56.009	1.00	27.23		C
ANISOU	2222	CD1	ILE	B	72	3428	3606	3314	22	-74	35	C
ATOM	2223	N	GLN	B	73	21.553	22.631	56.658	1.00	32.41		N
ANISOU	2223	N	GLN	B	73	3967	4343	4005	225	82	46	N
ATOM	2224	CA	GLN	B	73	22.830	23.207	56.198	1.00	35.61		C
ANISOU	2224	CA	GLN	B	73	4338	4637	4556	-118	143	98	C
ATOM	2225	C	GLN	B	73	22.603	23.430	54.694	1.00	37.25		C
ANISOU	2225	C	GLN	B	73	4631	4894	4628	0	2	29	C
ATOM	2226	O	GLN	B	73	22.109	22.545	53.991	1.00	36.37		O
ANISOU	2226	O	GLN	B	73	4495	4824	4500	-11	144	56	O
ATOM	2227	CB	GLN	B	73	23.977	22.265	56.532	1.00	37.02		C
ANISOU	2227	CB	GLN	B	73	4602	4820	4645	71	59	36	C
ATOM	2228	CG	GLN	B	73	25.375	22.878	56.447	1.00	38.88		C
ANISOU	2228	CG	GLN	B	73	4790	5080	4901	-61	33	-20	C
ATOM	2229	CD	GLN	B	73	25.906	22.962	55.028	1.00	39.95		C
ANISOU	2229	CD	GLN	B	73	5035	5183	4960	-9	63	6	C
ATOM	2230	OE1	GLN	B	73	25.656	22.086	54.197	1.00	40.10		O
ANISOU	2230	OE1	GLN	B	73	5044	5390	4803	-70	19	-15	O
ATOM	2231	NE2	GLN	B	73	26.645	24.024	54.736	1.00	40.37		N
ANISOU	2231	NE2	GLN	B	73	5030	5299	5011	-66	62	43	N
ATOM	2232	N	ALA	B	74	22.920	24.646	54.235	1.00	39.00		N
ANISOU	2232	N	ALA	B	74	4856	4933	5027	-14	76	81	N
ATOM	2233	CA	ALA	B	74	22.697	24.979	52.817	1.00	41.23		C
ANISOU	2233	CA	ALA	B	74	5221	5314	5130	-36	-33	86	C
ATOM	2234	C	ALA	B	74	23.427	23.938	52.003	1.00	42.80		C
ANISOU	2234	C	ALA	B	74	5445	5453	5364	-52	95	-26	C
ATOM	2235	O	ALA	B	74	24.478	23.548	52.524	1.00	44.84		O
ANISOU	2235	O	ALA	B	74	5616	5781	5640	86	77	32	O
ATOM	2236	CB	ALA	B	74	23.220	26.371	52.507	1.00	41.18		C
ANISOU	2236	CB	ALA	B	74	5213	5260	5175	-30	-10	2	C
ATOM	2237	N	ASP	B	75	22.984	23.374	50.882	1.00	43.38		N
ANISOU	2237	N	ASP	B	75	5569	5523	5393	-47	117	-63	N
ATOM	2238	CA	ASP	B	75	23.920	22.331	50.362	1.00	42.67		C
ANISOU	2238	CA	ASP	B	75	5413	5411	5387	-48	64	26	C
ATOM	2239	C	ASP	B	75	23.413	20.947	50.702	1.00	40.94		C
ANISOU	2239	C	ASP	B	75	5140	5349	5066	20	121	18	C
ATOM	2240	O	ASP	B	75	23.780	19.968	50.046	1.00	41.04		O
ANISOU	2240	O	ASP	B	75	5068	5417	5109	74	92	-28	O
ATOM	2241	N	GLN	B	76	22.576	20.843	51.735	1.00	39.10		N
ANISOU	2241	N	GLN	B	76	4907	4999	4949	51	47	-5	N
ATOM	2242	CA	GLN	B	76	21.884	19.598	52.000	1.00	36.70		C
ANISOU	2242	CA	GLN	B	76	4653	4850	4442	122	23	-44	C
ATOM	2243	C	GLN	B	76	20.705	19.672	50.993	1.00	35.71		C
ANISOU	2243	C	GLN	B	76	4500	4682	4386	58	117	-28	C
ATOM	2244	O	GLN	B	76	20.273	20.782	50.645	1.00	35.70		O
ANISOU	2244	O	GLN	B	76	4506	4670	4389	73	157	-26	O
ATOM	2245	CB	GLN	B	76	21.275	19.429	53.390	1.00	36.16		C
ANISOU	2245	CB	GLN	B	76	4548	4751	4439	72	19	-11	C
ATOM	2246	CG	GLN	B	76	22.308	19.265	54.507	1.00	35.85		C
ANISOU	2246	CG	GLN	B	76	4452	4742	4428	93	68	9	C
ATOM	2247	CD	GLN	B	76	21.613	18.955	55.829	1.00	35.73		C
ANISOU	2247	CD	GLN	B	76	4666	4592	4316	66	-48	21	C
ATOM	2248	OE1	GLN	B	76	21.081	19.855	56.481	1.00	34.71		O
ANISOU	2248	OE1	GLN	B	76	4189	4657	4344	147	14	78	O
ATOM	2249	NE2	GLN	B	76	21.633	17.669	56.182	1.00	35.30		N
ANISOU	2249	NE2	GLN	B	76	4580	4521	4309	-50	-84	-22	N
ATOM	2250	N	THR	B	77	20.251	18.533	50.552	1.00	35.00		N
ANISOU	2250	N	THR	B	77	4352	4621	4325	111	170	-59	N
ATOM	2251	CA	THR	B	77	19.118	18.487	49.624	1.00	35.59		C

ANISOU	2251	CA	THR	B	77	4537	4588	4398	78	43	-34	C
ATOM	2252	C	THR	B	77	17.887	17.990	50.355	1.00	35.67		C
ANISOU	2252	C	THR	B	77	4566	4511	4477	94	61	-58	C
ATOM	2253	O	THR	B	77	18.005	17.366	51.415	1.00	35.20		O
ANISOU	2253	O	THR	B	77	4453	4601	4320	146	77	-125	O
ATOM	2254	CB	THR	B	77	19.423	17.436	48.530	1.00	36.24		C
ANISOU	2254	CB	THR	B	77	4633	4648	4486	39	39	-72	C
ATOM	2255	OG1	THR	B	77	19.518	16.150	49.150	1.00	35.57		O
ANISOU	2255	OG1	THR	B	77	4498	4650	4369	101	88	-112	O
ATOM	2256	CG2	THR	B	77	20.714	17.763	47.809	1.00	36.61		C
ANISOU	2256	CG2	THR	B	77	4565	4790	4555	48	30	-88	C
ATOM	2257	N	PRO	B	78	16.715	18.068	49.742	1.00	36.39		N
ANISOU	2257	N	PRO	B	78	4685	4648	4495	129	-2	-20	N
ATOM	2258	CA	PRO	B	78	15.493	17.506	50.292	1.00	37.02		C
ANISOU	2258	CA	PRO	B	78	4681	4770	4615	65	7	-26	C
ATOM	2259	C	PRO	B	78	15.638	16.001	50.513	1.00	39.10		C
ANISOU	2259	C	PRO	B	78	5054	4873	4928	100	20	44	C
ATOM	2260	O	PRO	B	78	15.197	15.402	51.502	1.00	38.80		O
ANISOU	2260	O	PRO	B	78	4976	4916	4851	114	77	-16	O
ATOM	2261	CB	PRO	B	78	14.450	17.807	49.222	1.00	36.04		C
ANISOU	2261	CB	PRO	B	78	4715	4563	4416	58	55	-56	C
ATOM	2262	CG	PRO	B	78	14.964	19.057	48.580	1.00	34.93		C
ANISOU	2262	CG	PRO	B	78	4446	4572	4255	66	22	-74	C
ATOM	2263	CD	PRO	B	78	16.464	18.800	48.464	1.00	36.11		C
ANISOU	2263	CD	PRO	B	78	4519	4732	4469	124	-26	-47	C
ATOM	2264	N	GLU	B	79	16.292	15.329	49.551	1.00	40.36		N
ANISOU	2264	N	GLU	B	79	5193	5200	4942	148	52	-52	N
ATOM	2265	CA	GLU	B	79	16.553	13.892	49.693	1.00	42.01		C
ANISOU	2265	CA	GLU	B	79	5425	5273	5265	121	-12	-10	C
ATOM	2266	C	GLU	B	79	17.416	13.645	50.928	1.00	41.29		C
ANISOU	2266	C	GLU	B	79	5264	5245	5180	136	77	-70	C
ATOM	2267	O	GLU	B	79	17.142	12.732	51.718	1.00	41.38		O
ANISOU	2267	O	GLU	B	79	5311	5316	5095	188	71	-61	O
ATOM	2268	CB	GLU	B	79	17.197	13.360	48.410	1.00	43.78		C
ANISOU	2268	CB	GLU	B	79	5575	5681	5380	98	56	-94	C
ATOM	2269	CG	GLU	B	79	17.521	11.876	48.491	1.00	46.12		C
ANISOU	2269	CG	GLU	B	79	5937	5750	5836	60	-7	-31	C
ATOM	2270	CD	GLU	B	79	18.321	11.381	47.292	1.00	47.70		C
ANISOU	2270	CD	GLU	B	79	6102	6017	6006	83	100	-94	C
ATOM	2271	OE1	GLU	B	79	19.353	11.964	46.902	1.00	47.99		O
ANISOU	2271	OE1	GLU	B	79	6138	6021	6076	100	147	-99	O
ATOM	2272	OE2	GLU	B	79	17.879	10.357	46.742	1.00	48.39		O
ANISOU	2272	OE2	GLU	B	79	6172	6163	6052	17	62	-147	O
ATOM	2273	N	ASP	B	80	18.438	14.456	51.169	1.00	40.72		N
ANISOU	2273	N	ASP	B	80	5242	5181	5047	177	86	-87	N
ATOM	2274	CA	ASP	B	80	19.270	14.336	52.362	1.00	40.90		C
ANISOU	2274	CA	ASP	B	80	5181	5183	5177	92	27	-13	C
ATOM	2275	C	ASP	B	80	18.447	14.311	53.655	1.00	41.39		C
ANISOU	2275	C	ASP	B	80	5277	5258	5190	120	47	-7	C
ATOM	2276	O	ASP	B	80	18.662	13.494	54.561	1.00	41.76		O
ANISOU	2276	O	ASP	B	80	5337	5353	5177	202	6	4	O
ATOM	2277	CB	ASP	B	80	20.255	15.505	52.434	1.00	40.50		C
ANISOU	2277	CB	ASP	B	80	5105	5202	5082	79	58	-7	C
ATOM	2278	CG	ASP	B	80	21.458	15.369	51.531	1.00	39.97		C
ANISOU	2278	CG	ASP	B	80	5073	5096	5017	71	11	-31	C
ATOM	2279	OD1	ASP	B	80	21.891	14.227	51.288	1.00	39.37		O
ANISOU	2279	OD1	ASP	B	80	4979	5115	4866	95	39	-8	O
ATOM	2280	OD2	ASP	B	80	22.002	16.390	51.058	1.00	40.19		O
ANISOU	2280	OD2	ASP	B	80	5059	5128	5083	139	87	-18	O
ATOM	2281	N	LEU	B	81	17.452	15.193	53.752	1.00	40.72		N
ANISOU	2281	N	LEU	B	81	5205	5182	5085	94	35	6	N
ATOM	2282	CA	LEU	B	81	16.604	15.338	54.931	1.00	39.97		C
ANISOU	2282	CA	LEU	B	81	5058	5090	5039	54	-28	48	C
ATOM	2283	C	LEU	B	81	15.333	14.528	54.960	1.00	39.64		C

ANISOU	2283	C	LEU	B	81	5037	5034	4991	88	4	70	C
ATOM	2284	O	LEU	B	81	14.504	14.683	55.869	1.00	38.32		O
ANISOU	2284	O	LEU	B	81	4836	4787	4938	92	-92	109	O
ATOM	2285	CB	LEU	B	81	16.325	16.856	55.064	1.00	39.74		C
ANISOU	2285	CB	LEU	B	81	5066	5109	4926	13	51	-42	C
ATOM	2286	CG	LEU	B	81	17.616	17.650	55.337	1.00	39.96		C
ANISOU	2286	CG	LEU	B	81	5045	5143	4994	-2	59	18	C
ATOM	2287	CD1	LEU	B	81	17.503	19.114	54.972	1.00	40.36		C
ANISOU	2287	CD1	LEU	B	81	5140	5111	5084	44	46	-41	C
ATOM	2288	CD2	LEU	B	81	17.999	17.511	56.809	1.00	40.56		C
ANISOU	2288	CD2	LEU	B	81	5128	5270	5015	-23	15	-53	C
ATOM	2289	N	ASP	B	82	15.093	13.654	53.978	1.00	40.45		N
ANISOU	2289	N	ASP	B	82	5185	5067	5115	74	-35	28	N
ATOM	2290	CA	ASP	B	82	13.890	12.823	53.960	1.00	41.27		C
ANISOU	2290	CA	ASP	B	82	5147	5240	5295	55	-43	-68	C
ATOM	2291	C	ASP	B	82	12.610	13.641	53.846	1.00	38.94		C
ANISOU	2291	C	ASP	B	82	5091	4877	4825	-39	-5	1	C
ATOM	2292	O	ASP	B	82	11.569	13.350	54.437	1.00	38.51		O
ANISOU	2292	O	ASP	B	82	5005	4892	4733	-45	-35	-82	O
ATOM	2293	CB	ASP	B	82	13.903	11.949	55.217	1.00	44.41		C
ANISOU	2293	CB	ASP	B	82	5763	5606	5506	71	-26	88	C
ATOM	2294	CG	ASP	B	82	12.787	10.949	55.365	1.00	47.24		C
ANISOU	2294	CG	ASP	B	82	5952	5986	6012	-102	2	16	C
ATOM	2295	OD1	ASP	B	82	12.202	10.534	54.333	1.00	48.41		O
ANISOU	2295	OD1	ASP	B	82	6186	6236	5971	-45	-5	-23	O
ATOM	2296	OD2	ASP	B	82	12.442	10.561	56.505	1.00	48.88		O
ANISOU	2296	OD2	ASP	B	82	6341	6238	5993	-28	15	14	O
ATOM	2297	N	MET	B	83	12.661	14.741	53.092	1.00	36.91		N
ANISOU	2297	N	MET	B	83	4787	4781	4457	75	-6	-95	N
ATOM	2298	CA	MET	B	83	11.470	15.569	52.898	1.00	35.33		C
ANISOU	2298	CA	MET	B	83	4651	4482	4292	-7	90	-43	C
ATOM	2299	C	MET	B	83	10.453	14.882	51.998	1.00	36.41		C
ANISOU	2299	C	MET	B	83	4689	4652	4493	29	10	-71	C
ATOM	2300	O	MET	B	83	10.818	14.005	51.200	1.00	37.09		O
ANISOU	2300	O	MET	B	83	4971	4677	4445	1	1	-132	O
ATOM	2301	CB	MET	B	83	11.882	16.932	52.333	1.00	33.81		C
ANISOU	2301	CB	MET	B	83	4343	4369	4133	84	-44	-86	C
ATOM	2302	CG	MET	B	83	12.881	17.677	53.217	1.00	31.70		C
ANISOU	2302	CG	MET	B	83	4195	4009	3839	140	80	-29	C
ATOM	2303	SD	MET	B	83	13.259	19.326	52.606	1.00	31.16		S
ANISOU	2303	SD	MET	B	83	4237	3999	3603	191	77	-73	S
ATOM	2304	CE	MET	B	83	13.994	20.038	54.074	1.00	31.37		C
ANISOU	2304	CE	MET	B	83	4141	4011	3766	96	11	-50	C
ATOM	2305	N	GLU	B	84	9.183	15.224	52.135	1.00	36.04		N
ANISOU	2305	N	GLU	B	84	4662	4593	4439	-52	-18	-109	N
ATOM	2306	CA	GLU	B	84	8.084	14.752	51.318	1.00	35.35		C
ANISOU	2306	CA	GLU	B	84	4504	4572	4356	29	-38	-2	C
ATOM	2307	C	GLU	B	84	7.364	15.973	50.736	1.00	35.04		C
ANISOU	2307	C	GLU	B	84	4491	4498	4322	-60	-45	-51	C
ATOM	2308	O	GLU	B	84	7.447	17.076	51.253	1.00	33.52		O
ANISOU	2308	O	GLU	B	84	4285	4465	3988	54	-109	42	O
ATOM	2309	CB	GLU	B	84	7.055	13.905	52.049	1.00	35.95		C
ANISOU	2309	CB	GLU	B	84	4539	4620	4501	-45	-58	-23	C
ATOM	2310	N	ASP	B	85	6.648	15.721	49.639	1.00	34.60		N
ANISOU	2310	N	ASP	B	85	4265	4627	4253	-3	2	-18	N
ATOM	2311	CA	ASP	B	85	5.945	16.778	48.935	1.00	35.80		C
ANISOU	2311	CA	ASP	B	85	4574	4602	4427	14	-8	-40	C
ATOM	2312	C	ASP	B	85	5.078	17.603	49.870	1.00	34.39		C
ANISOU	2312	C	ASP	B	85	4290	4555	4222	-54	-43	26	C
ATOM	2313	O	ASP	B	85	4.333	17.101	50.719	1.00	33.99		O
ANISOU	2313	O	ASP	B	85	4317	4566	4030	-146	-69	-109	O
ATOM	2314	CB	ASP	B	85	5.139	16.090	47.819	1.00	37.12		C
ANISOU	2314	CB	ASP	B	85	4608	4868	4626	-82	-71	-81	C
ATOM	2315	CG	ASP	B	85	4.674	17.003	46.726	1.00	38.28		C

ANISOU	2315	CG	ASP	B	85	4901	4993	4651	-26	-13	-12	C
ATOM	2316	OD1	ASP	B	85	5.322	18.024	46.401	1.00	37.59		O
ANISOU	2316	OD1	ASP	B	85	4671	5044	4569	-58	-83	-118	O
ATOM	2317	OD2	ASP	B	85	3.599	16.684	46.158	1.00	39.56		O
ANISOU	2317	OD2	ASP	B	85	4901	5201	4928	-143	13	-79	O
ATOM	2318	N	ASN	B	86	5.200	18.915	49.750	1.00	33.19		N
ANISOU	2318	N	ASN	B	86	4126	4521	3966	-24	-112	-63	N
ATOM	2319	CA	ASN	B	86	4.486	19.959	50.444	1.00	33.64		C
ANISOU	2319	CA	ASN	B	86	4286	4460	4035	-3	-110	-50	C
ATOM	2320	C	ASN	B	86	4.971	20.168	51.884	1.00	32.91		C
ANISOU	2320	C	ASN	B	86	4150	4355	3998	33	-46	-96	C
ATOM	2321	O	ASN	B	86	4.292	20.835	52.672	1.00	31.61		O
ANISOU	2321	O	ASN	B	86	3942	4476	3592	-18	-182	-83	O
ATOM	2322	CB	ASN	B	86	2.966	19.715	50.429	1.00	35.28		C
ANISOU	2322	CB	ASN	B	86	4367	4624	4415	1	-63	-2	C
ATOM	2323	CG	ASN	B	86	2.442	19.686	48.992	1.00	36.76		C
ANISOU	2323	CG	ASN	B	86	4645	4833	4487	-8	-96	-37	C
ATOM	2324	OD1	ASN	B	86	2.767	20.542	48.182	1.00	37.26		O
ANISOU	2324	OD1	ASN	B	86	4795	4929	4432	38	-42	-24	O
ATOM	2325	ND2	ASN	B	86	1.642	18.663	48.737	1.00	37.64		N
ANISOU	2325	ND2	ASN	B	86	4948	4773	4579	-50	-59	2	N
ATOM	2326	N	ASP	B	87	6.158	19.644	52.196	1.00	32.15		N
ANISOU	2326	N	ASP	B	87	4132	4238	3843	-31	-77	-18	N
ATOM	2327	CA	ASP	B	87	6.704	19.866	53.527	1.00	31.06		C
ANISOU	2327	CA	ASP	B	87	4030	3998	3774	-112	20	-75	C
ATOM	2328	C	ASP	B	87	7.021	21.344	53.685	1.00	30.65		C
ANISOU	2328	C	ASP	B	87	4040	3998	3606	-34	-20	-63	C
ATOM	2329	O	ASP	B	87	7.159	22.090	52.725	1.00	29.16		O
ANISOU	2329	O	ASP	B	87	3780	3974	3324	-105	-114	-234	O
ATOM	2330	CB	ASP	B	87	7.928	19.025	53.815	1.00	31.79		C
ANISOU	2330	CB	ASP	B	87	4130	4088	3861	-62	-38	16	C
ATOM	2331	CG	ASP	B	87	7.537	17.641	54.327	1.00	32.05		C
ANISOU	2331	CG	ASP	B	87	4249	4050	3879	-68	-87	-69	C
ATOM	2332	OD1	ASP	B	87	6.361	17.459	54.698	1.00	33.61		O
ANISOU	2332	OD1	ASP	B	87	4358	4432	3980	-148	14	-89	O
ATOM	2333	OD2	ASP	B	87	8.421	16.783	54.313	1.00	32.01		O
ANISOU	2333	OD2	ASP	B	87	4192	4111	3859	-4	-251	-30	O
ATOM	2334	N	ILE	B	88	7.179	21.725	54.967	1.00	29.57		N
ANISOU	2334	N	ILE	B	88	3743	3903	3590	-9	58	-186	N
ATOM	2335	CA	ILE	B	88	7.429	23.118	55.277	1.00	28.05		C
ANISOU	2335	CA	ILE	B	88	3481	3766	3412	-14	133	39	C
ATOM	2336	C	ILE	B	88	8.797	23.270	55.931	1.00	27.26		C
ANISOU	2336	C	ILE	B	88	3530	3525	3302	14	67	-88	C
ATOM	2337	O	ILE	B	88	9.174	22.471	56.778	1.00	28.03		O
ANISOU	2337	O	ILE	B	88	3315	3848	3486	117	212	115	O
ATOM	2338	CB	ILE	B	88	6.396	23.659	56.288	1.00	28.41		C
ANISOU	2338	CB	ILE	B	88	3428	3859	3507	42	99	-37	C
ATOM	2339	CG1	ILE	B	88	4.990	23.528	55.688	1.00	28.52		C
ANISOU	2339	CG1	ILE	B	88	3543	3988	3307	-27	23	-25	C
ATOM	2340	CG2	ILE	B	88	6.675	25.103	56.656	1.00	28.14		C
ANISOU	2340	CG2	ILE	B	88	3510	3821	3361	6	127	43	C
ATOM	2341	CD1	ILE	B	88	3.877	23.820	56.676	1.00	29.56		C
ANISOU	2341	CD1	ILE	B	88	3529	4144	3559	69	95	-17	C
ATOM	2342	N	ILE	B	89	9.483	24.324	55.524	1.00	26.67		N
ANISOU	2342	N	ILE	B	89	3350	3743	3041	77	156	60	N
ATOM	2343	CA	ILE	B	89	10.741	24.724	56.107	1.00	26.26		C
ANISOU	2343	CA	ILE	B	89	3344	3526	3106	-45	110	-24	C
ATOM	2344	C	ILE	B	89	10.468	25.988	56.897	1.00	26.67		C
ANISOU	2344	C	ILE	B	89	3488	3568	3080	26	4	1	C
ATOM	2345	O	ILE	B	89	9.939	26.938	56.324	1.00	27.18		O
ANISOU	2345	O	ILE	B	89	3685	3667	2977	124	-46	-68	O
ATOM	2346	CB	ILE	B	89	11.821	24.953	55.026	1.00	26.40		C
ANISOU	2346	CB	ILE	B	89	3318	3507	3205	-31	57	-9	C
ATOM	2347	CG1	ILE	B	89	12.107	23.586	54.379	1.00	26.98		C

ANISOU	2347	CG1	ILE	B	89	3411	3604	3237	46	116	-72	C
ATOM	2348	CG2	ILE	B	89	13.054	25.557	55.646	1.00	24.42		C
ANISOU	2348	CG2	ILE	B	89	3131	3182	2964	51	97	-16	C
ATOM	2349	CD1	ILE	B	89	12.906	23.744	53.075	1.00	28.07		C
ANISOU	2349	CD1	ILE	B	89	3552	3886	3226	-60	89	28	C
ATOM	2350	N	GLU	B	90	10.839	25.973	58.188	1.00	24.16		N
ANISOU	2350	N	GLU	B	90	3025	3221	2935	-2	33	23	N
ATOM	2351	CA	GLU	B	90	10.607	27.175	58.989	1.00	24.49		C
ANISOU	2351	CA	GLU	B	90	3225	3207	2871	-85	66	68	C
ATOM	2352	C	GLU	B	90	11.857	28.035	59.003	1.00	24.52		C
ANISOU	2352	C	GLU	B	90	3213	3201	2902	-45	-60	-23	C
ATOM	2353	O	GLU	B	90	12.955	27.534	59.231	1.00	27.01		O
ANISOU	2353	O	GLU	B	90	3227	3607	3429	8	69	-18	O
ATOM	2354	CB	GLU	B	90	10.329	26.734	60.450	1.00	24.61		C
ANISOU	2354	CB	GLU	B	90	3184	3296	2871	-32	61	48	C
ATOM	2355	CG	GLU	B	90	9.076	25.871	60.526	1.00	25.59		C
ANISOU	2355	CG	GLU	B	90	3121	3430	3170	-104	-87	-8	C
ATOM	2356	CD	GLU	B	90	8.774	25.403	61.928	1.00	25.96		C
ANISOU	2356	CD	GLU	B	90	3274	3335	3253	-120	-62	21	C
ATOM	2357	OE1	GLU	B	90	9.683	25.438	62.787	1.00	26.78		O
ANISOU	2357	OE1	GLU	B	90	3320	3461	3397	-99	-209	-65	O
ATOM	2358	OE2	GLU	B	90	7.637	24.958	62.195	1.00	25.52		O
ANISOU	2358	OE2	GLU	B	90	2889	3639	3166	-38	-142	9	O
ATOM	2359	N	ALA	B	91	11.681	29.330	58.791	1.00	24.70		N
ANISOU	2359	N	ALA	B	91	3094	3241	3049	-108	23	84	N
ATOM	2360	CA	ALA	B	91	12.813	30.258	58.866	1.00	25.40		C
ANISOU	2360	CA	ALA	B	91	3151	3299	3201	-140	-149	81	C
ATOM	2361	C	ALA	B	91	12.744	30.993	60.200	1.00	26.48		C
ANISOU	2361	C	ALA	B	91	3404	3548	3110	33	-80	128	C
ATOM	2362	O	ALA	B	91	11.819	31.808	60.384	1.00	27.71		O
ANISOU	2362	O	ALA	B	91	3475	3734	3321	126	-220	56	O
ATOM	2363	CB	ALA	B	91	12.689	31.289	57.742	1.00	26.82		C
ANISOU	2363	CB	ALA	B	91	3429	3610	3151	-21	-123	192	C
ATOM	2364	N	HIS	B	92	13.708	30.727	61.091	1.00	25.06		N
ANISOU	2364	N	HIS	B	92	3007	3421	3094	-168	-69	96	N
ATOM	2365	CA	HIS	B	92	13.679	31.375	62.395	1.00	24.54		C
ANISOU	2365	CA	HIS	B	92	3116	3121	3086	7	-76	165	C
ATOM	2366	C	HIS	B	92	14.823	32.382	62.580	1.00	25.10		C
ANISOU	2366	C	HIS	B	92	3187	3221	3130	-61	-92	160	C
ATOM	2367	O	HIS	B	92	15.915	32.126	62.119	1.00	26.43		O
ANISOU	2367	O	HIS	B	92	3207	3463	3374	-105	-109	265	O
ATOM	2368	CB	HIS	B	92	13.949	30.292	63.471	1.00	24.59		C
ANISOU	2368	CB	HIS	B	92	3147	3187	3007	-35	-22	205	C
ATOM	2369	CG	HIS	B	92	12.860	29.284	63.631	1.00	23.34		C
ANISOU	2369	CG	HIS	B	92	2871	3030	2966	90	-82	45	C
ATOM	2370	ND1	HIS	B	92	11.964	29.387	64.667	1.00	23.67		N
ANISOU	2370	ND1	HIS	B	92	2897	3055	3043	-29	-1	212	N
ATOM	2371	CD2	HIS	B	92	12.531	28.172	62.948	1.00	22.65		C
ANISOU	2371	CD2	HIS	B	92	2812	2915	2879	18	-113	157	C
ATOM	2372	CE1	HIS	B	92	11.097	28.402	64.606	1.00	23.25		C
ANISOU	2372	CE1	HIS	B	92	2936	3001	2894	-43	-101	-47	C
ATOM	2373	NE2	HIS	B	92	11.407	27.627	63.574	1.00	23.09		N
ANISOU	2373	NE2	HIS	B	92	2752	3110	2912	70	119	11	N
ATOM	2374	N	ARG	B	93	14.566	33.443	63.319	1.00	25.17		N
ANISOU	2374	N	ARG	B	93	3261	3157	3147	16	-168	226	N
ATOM	2375	CA	ARG	B	93	15.564	34.440	63.679	1.00	26.29		C
ANISOU	2375	CA	ARG	B	93	3264	3397	3329	-71	-179	285	C
ATOM	2376	C	ARG	B	93	16.560	33.818	64.671	1.00	25.15		C
ANISOU	2376	C	ARG	B	93	3218	3209	3128	-100	-80	232	C
ATOM	2377	O	ARG	B	93	16.153	33.028	65.553	1.00	24.62		O
ANISOU	2377	O	ARG	B	93	3068	3166	3121	-26	-56	327	O
ATOM	2378	CB	ARG	B	93	14.765	35.572	64.320	1.00	30.02		C
ANISOU	2378	CB	ARG	B	93	3881	3772	3754	103	38	150	C
ATOM	2379	CG	ARG	B	93	15.472	36.824	64.747	1.00	35.79		C

ANISOU	2379	CG	ARG	B	93	4658	4347	4596	-231	-169	0	C
ATOM	2380	CD	ARG	B	93	14.488	37.735	65.519	1.00	40.21		C
ANISOU	2380	CD	ARG	B	93	5143	5015	5120	142	61	6	C
ATOM	2381	NE	ARG	B	93	15.227	38.722	66.283	1.00	43.42		N
ANISOU	2381	NE	ARG	B	93	5588	5369	5542	-81	-138	-12	N
ATOM	2382	CZ	ARG	B	93	14.867	39.568	67.228	1.00	45.51		C
ANISOU	2382	CZ	ARG	B	93	5870	5677	5744	49	7	-78	C
ATOM	2383	NH1	ARG	B	93	13.612	39.655	67.659	1.00	46.68		N
ANISOU	2383	NH1	ARG	B	93	5909	5935	5893	-9	45	14	N
ATOM	2384	NH2	ARG	B	93	15.802	40.364	67.762	1.00	46.46		N
ANISOU	2384	NH2	ARG	B	93	5921	5795	5937	-29	-27	-69	N
ATOM	2385	N	GLU	B	94	17.835	34.154	64.532	1.00	24.37		N
ANISOU	2385	N	GLU	B	94	3122	3107	3031	77	-9	220	N
ATOM	2386	CA	GLU	B	94	18.881	33.732	65.481	1.00	23.40		C
ANISOU	2386	CA	GLU	B	94	3098	2916	2878	4	20	217	C
ATOM	2387	C	GLU	B	94	18.391	34.161	66.860	1.00	21.74		C
ANISOU	2387	C	GLU	B	94	2883	2678	2697	-79	-97	290	C
ATOM	2388	O	GLU	B	94	17.644	35.152	67.020	1.00	21.06		O
ANISOU	2388	O	GLU	B	94	3010	2628	2365	-63	-18	350	O
ATOM	2389	CB	GLU	B	94	20.226	34.432	65.247	1.00	27.46		C
ANISOU	2389	CB	GLU	B	94	3263	3537	3633	-91	195	207	C
ATOM	2390	CG	GLU	B	94	21.258	34.449	66.351	1.00	32.08		C
ANISOU	2390	CG	GLU	B	94	4019	4147	4023	-45	-150	167	C
ATOM	2391	CD	GLU	B	94	22.579	35.128	66.043	1.00	35.29		C
ANISOU	2391	CD	GLU	B	94	4167	4527	4715	-120	74	160	C
ATOM	2392	OE1	GLU	B	94	22.562	36.224	65.424	1.00	36.54		O
ANISOU	2392	OE1	GLU	B	94	4394	4616	4872	-37	125	272	O
ATOM	2393	OE2	GLU	B	94	23.695	34.650	66.419	1.00	36.86		O
ANISOU	2393	OE2	GLU	B	94	4582	4548	4876	95	21	165	O
ATOM	2394	N	GLN	B	95	18.801	33.366	67.875	1.00	19.64		N
ANISOU	2394	N	GLN	B	95	2618	2349	2494	-82	46	174	N
ATOM	2395	CA	GLN	B	95	18.424	33.720	69.241	1.00	18.66		C
ANISOU	2395	CA	GLN	B	95	2531	2133	2427	-190	-26	154	C
ATOM	2396	C	GLN	B	95	19.717	33.972	70.027	1.00	17.79		C
ANISOU	2396	C	GLN	B	95	2290	2271	2199	-4	17	200	C
ATOM	2397	O	GLN	B	95	20.686	33.195	69.891	1.00	19.08		O
ANISOU	2397	O	GLN	B	95	2482	2421	2346	31	-243	66	O
ATOM	2398	CB	GLN	B	95	17.664	32.611	70.007	1.00	17.94		C
ANISOU	2398	CB	GLN	B	95	2313	2129	2376	-120	-69	166	C
ATOM	2399	CG	GLN	B	95	16.305	32.372	69.311	1.00	18.66		C
ANISOU	2399	CG	GLN	B	95	2334	2316	2438	-32	-176	240	C
ATOM	2400	CD	GLN	B	95	15.559	31.171	69.883	1.00	20.08		C
ANISOU	2400	CD	GLN	B	95	2645	2434	2552	-216	-34	7	C
ATOM	2401	OE1	GLN	B	95	16.210	30.391	70.569	1.00	21.94		O
ANISOU	2401	OE1	GLN	B	95	2934	2518	2883	-71	1	136	O
ATOM	2402	NE2	GLN	B	95	14.280	31.092	69.613	1.00	20.24		N
ANISOU	2402	NE2	GLN	B	95	2640	2405	2647	77	-81	173	N
ATOM	2403	N	ILE	B	96	19.701	35.005	70.871	1.00	19.29		N
ANISOU	2403	N	ILE	B	96	2494	2188	2646	-118	-79	139	N
ATOM	2404	CA	ILE	B	96	20.823	35.279	71.764	1.00	19.53		C
ANISOU	2404	CA	ILE	B	96	2611	2384	2424	-68	5	85	C
ATOM	2405	C	ILE	B	96	20.254	35.486	73.178	1.00	18.46		C
ANISOU	2405	C	ILE	B	96	2689	1956	2370	16	23	129	C
ATOM	2406	O	ILE	B	96	19.038	35.698	73.361	1.00	17.67		O
ANISOU	2406	O	ILE	B	96	2559	2087	2067	37	57	79	O
ATOM	2407	CB	ILE	B	96	21.644	36.547	71.412	1.00	21.68		C
ANISOU	2407	CB	ILE	B	96	2942	2501	2793	-144	82	117	C
ATOM	2408	CG1	ILE	B	96	20.722	37.767	71.378	1.00	22.68		C
ANISOU	2408	CG1	ILE	B	96	3119	2624	2873	-66	13	167	C
ATOM	2409	CG2	ILE	B	96	22.289	36.340	70.046	1.00	24.38		C
ANISOU	2409	CG2	ILE	B	96	3177	3023	3063	-232	295	23	C
ATOM	2410	CD1	ILE	B	96	21.459	39.090	71.209	1.00	24.56		C
ANISOU	2410	CD1	ILE	B	96	3550	2749	3034	-222	56	68	C
ATOM	2411	N	GLY	B	97	21.127	35.430	74.181	1.00	17.64		N

ANISOU	2411	N	GLY	B	97	2402	1926	2374	-78	97	56	N
ATOM	2412	CA	GLY	B	97	20.667	35.692	75.527	1.00	16.66		C
ANISOU	2412	CA	GLY	B	97	2257	1869	2203	40	-122	173	C
ATOM	2413	C	GLY	B	97	21.833	35.730	76.508	1.00	16.37		C
ANISOU	2413	C	GLY	B	97	2346	1846	2027	-48	15	65	C
ATOM	2414	O	GLY	B	97	22.844	35.095	76.262	1.00	15.60		O
ANISOU	2414	O	GLY	B	97	2294	1889	1744	22	100	33	O
ATOM	2415	N	GLY	B	98	21.589	36.477	77.568	1.00	15.68		N
ANISOU	2415	N	GLY	B	98	2453	1617	1888	-159	135	180	N
ATOM	2416	CA	GLY	B	98	22.595	36.730	78.598	1.00	16.42		C
ANISOU	2416	CA	GLY	B	98	2469	1719	2050	-46	21	75	C
ATOM	2417	C	GLY	B	98	22.176	35.984	79.863	1.00	16.46		C
ANISOU	2417	C	GLY	B	98	2600	1615	2039	-96	-27	-56	C
ATOM	2418	O	GLY	B	98	23.034	36.071	80.909	1.00	17.02		O
ANISOU	2418	O	GLY	B	98	2479	1915	2071	132	-111	62	O
TER	2419		GLY	B	98							
HETATM	2420	O	HOH		1	19.651	30.058	83.232	1.00	17.25		O
ANISOU	2420	O	HOH		1	2472	1924	2157	-142	353	-122	O
HETATM	2421	O	HOH		2	19.243	26.284	69.954	1.00	19.68		O
ANISOU	2421	O	HOH		2	2524	2156	2796	-140	74	198	O
HETATM	2422	O	HOH		3	24.806	33.659	77.583	1.00	16.28		O
ANISOU	2422	O	HOH		3	2295	1881	2009	-78	238	120	O
HETATM	2423	O	HOH		4	35.539	13.854	89.780	1.00	27.42		O
ANISOU	2423	O	HOH		4	3329	2782	4306	-453	-173	-252	O
HETATM	2424	O	HOH		5	13.626	24.057	73.516	1.00	16.34		O
ANISOU	2424	O	HOH		5	2197	1908	2103	-56	25	16	O
HETATM	2425	O	HOH		6	19.889	20.307	63.946	1.00	24.27		O
ANISOU	2425	O	HOH		6	3109	3221	2889	93	-240	84	O
HETATM	2426	O	HOH		7	19.459	27.209	83.447	1.00	19.36		O
ANISOU	2426	O	HOH		7	3087	2146	2122	-11	454	219	O
HETATM	2427	O	HOH		8	36.110	32.059	76.728	1.00	20.80		O
ANISOU	2427	O	HOH		8	2587	2271	3045	-111	-177	46	O
HETATM	2428	O	HOH		9	39.603	34.562	74.994	1.00	25.42		O
ANISOU	2428	O	HOH		9	3037	2989	3634	-155	271	-117	O
HETATM	2429	O	HOH		10	7.319	15.790	68.932	1.00	23.05		O
ANISOU	2429	O	HOH		10	2891	3023	2845	-235	121	-301	O
HETATM	2430	O	HOH		11	36.269	31.500	79.570	1.00	24.80		O
ANISOU	2430	O	HOH		11	3213	3256	2953	-161	-343	-87	O
HETATM	2431	O	HOH		12	28.941	41.240	78.512	1.00	23.16		O
ANISOU	2431	O	HOH		12	3083	2195	3523	-76	314	91	O
HETATM	2432	O	HOH		13	13.566	17.047	65.780	1.00	26.41		O
ANISOU	2432	O	HOH		13	3433	3556	3045	-340	-104	-348	O
HETATM	2433	O	HOH		14	26.963	30.646	90.501	1.00	22.12		O
ANISOU	2433	O	HOH		14	3325	2856	2223	-319	-245	-104	O
HETATM	2434	O	HOH		15	37.785	24.360	80.585	1.00	24.25		O
ANISOU	2434	O	HOH		15	2761	3370	3083	482	-101	86	O
HETATM	2435	O	HOH		16	19.263	19.400	67.772	1.00	30.56		O
ANISOU	2435	O	HOH		16	3589	3688	4336	-126	-231	86	O
HETATM	2436	O	HOH		17	33.444	35.183	80.828	1.00	22.86		O
ANISOU	2436	O	HOH		17	3448	2497	2742	316	-292	219	O
HETATM	2437	O	HOH		18	19.956	21.117	86.302	1.00	23.06		O
ANISOU	2437	O	HOH		18	3394	2177	3190	43	28	175	O
HETATM	2438	O	HOH		19	12.619	17.491	86.136	1.00	29.62		O
ANISOU	2438	O	HOH		19	3541	3718	3996	-50	55	-99	O
HETATM	2439	O	HOH		20	13.054	28.919	73.370	1.00	20.76		O
ANISOU	2439	O	HOH		20	2517	2230	3140	18	-17	-64	O
HETATM	2440	O	HOH		21	35.696	38.599	74.730	1.00	22.85		O
ANISOU	2440	O	HOH		21	3062	2488	3132	-290	295	-364	O
HETATM	2441	O	HOH		22	24.135	9.921	89.518	1.00	30.44		O
ANISOU	2441	O	HOH		22	3960	3382	4226	285	12	-53	O
HETATM	2442	O	HOH		23	2.463	9.690	84.033	1.00	28.47		O
ANISOU	2442	O	HOH		23	3535	3243	4038	-675	-51	93	O
HETATM	2443	O	HOH		24	31.799	39.656	85.633	1.00	23.50		O
ANISOU	2443	O	HOH		24	3441	2251	3238	-157	-71	-8	O

2025.04.04 14:00:00

HETATM	2444	O	HOH	25	32.112	33.143	82.096	1.00	23.76		O
ANISOU	2444	O	HOH	25	3332	2950	2745	595	247	387	O
HETATM	2445	O	HOH	26	7.698	22.413	63.301	1.00	29.01		O
ANISOU	2445	O	HOH	26	3742	3973	3307	63	-5	279	O
HETATM	2446	O	HOH	27	14.534	34.761	85.038	1.00	26.28		O
ANISOU	2446	O	HOH	27	3462	2768	3757	473	100	-20	O
HETATM	2447	O	HOH	28	11.023	22.853	61.991	1.00	25.33		O
ANISOU	2447	O	HOH	28	3027	3163	3434	-78	96	41	O
HETATM	2448	O	HOH	29	22.313	30.321	59.892	1.00	39.42		O
ANISOU	2448	O	HOH	29	5046	5136	4797	-61	77	-36	O
HETATM	2449	O	HOH	30	31.490	17.266	66.262	1.00	24.59		O
ANISOU	2449	O	HOH	30	2982	3006	3355	-67	237	-316	O
HETATM	2450	O	HOH	31	27.364	41.768	84.190	1.00	26.32		O
ANISOU	2450	O	HOH	31	3256	2898	3847	-75	105	106	O
HETATM	2451	O	HOH	32	12.813	33.953	71.853	1.00	27.15		O
ANISOU	2451	O	HOH	32	3106	3587	3623	23	-590	-124	O
HETATM	2452	O	HOH	33	30.540	20.936	90.768	1.00	29.41		O
ANISOU	2452	O	HOH	33	3725	4009	3443	-67	-314	263	O
HETATM	2453	O	HOH	34	29.469	9.066	77.394	1.00	31.55		O
ANISOU	2453	O	HOH	34	4090	3174	4725	-10	-76	67	O
HETATM	2454	O	HOH	35	7.046	9.814	70.879	1.00	27.40		O
ANISOU	2454	O	HOH	35	3554	3351	3507	-30	-102	-126	O
HETATM	2455	O	HOH	36	11.781	34.052	64.099	1.00	26.97		O
ANISOU	2455	O	HOH	36	3606	3451	3191	-7	-188	104	O
HETATM	2456	O	HOH	37	13.747	32.917	67.074	1.00	25.84		O
ANISOU	2456	O	HOH	37	3150	3070	3599	138	-234	29	O
HETATM	2457	O	HOH	38	40.989	22.800	71.958	1.00	30.02		O
ANISOU	2457	O	HOH	38	3543	3952	3909	370	253	-161	O
HETATM	2458	O	HOH	39	35.724	20.786	64.481	1.00	31.70		O
ANISOU	2458	O	HOH	39	3747	4130	4169	41	54	-302	O
HETATM	2459	O	HOH	40	29.248	31.177	92.034	1.00	27.04		O
ANISOU	2459	O	HOH	40	3561	3525	3189	41	106	-52	O
HETATM	2460	O	HOH	41	16.731	19.308	68.657	1.00	23.24		O
ANISOU	2460	O	HOH	41	2932	2937	2962	-35	18	-260	O
HETATM	2461	O	HOH	42	11.592	31.817	65.888	1.00	29.89		O
ANISOU	2461	O	HOH	42	3548	4075	3733	54	315	103	O
HETATM	2462	O	HOH	43	9.517	22.269	59.558	1.00	24.82		O
ANISOU	2462	O	HOH	43	3149	3622	2660	111	-171	-88	O
HETATM	2463	O	HOH	44	15.935	10.353	84.557	1.00	30.61		O
ANISOU	2463	O	HOH	44	3701	3624	4304	-88	-58	18	O
HETATM	2464	O	HOH	45	28.604	41.191	88.587	1.00	28.52		O
ANISOU	2464	O	HOH	45	3662	3098	4075	-223	172	91	O
HETATM	2465	O	HOH	46	35.793	33.851	80.461	1.00	29.90		O
ANISOU	2465	O	HOH	46	3664	3710	3987	59	-40	237	O
HETATM	2466	O	HOH	47	40.058	25.649	81.260	1.00	33.89		O
ANISOU	2466	O	HOH	47	3757	4632	4485	-46	-155	80	O
HETATM	2467	O	HOH	48	17.335	25.487	46.362	1.00	36.44		O
ANISOU	2467	O	HOH	48	4492	4989	4366	92	344	122	O
HETATM	2468	O	HOH	49	35.363	39.486	72.192	1.00	33.90		O
ANISOU	2468	O	HOH	49	4422	4305	4152	-46	-124	-128	O
HETATM	2469	O	HOH	50	31.905	33.410	85.105	1.00	28.47		O
ANISOU	2469	O	HOH	50	4198	2777	3842	162	-364	-37	O
HETATM	2470	O	HOH	51	20.232	8.433	81.394	1.00	37.25		O
ANISOU	2470	O	HOH	51	4842	4543	4767	23	177	-76	O
HETATM	2471	O	HOH	52	23.343	22.748	60.568	1.00	30.09		O
ANISOU	2471	O	HOH	52	3582	4361	3489	160	-88	-116	O
HETATM	2472	O	HOH	53	22.966	9.616	83.135	1.00	31.32		O
ANISOU	2472	O	HOH	53	4181	3906	3815	76	59	-1	O
HETATM	2473	O	HOH	54	41.448	27.414	79.808	1.00	31.69		O
ANISOU	2473	O	HOH	54	3778	3902	4360	216	-132	74	O
HETATM	2474	O	HOH	55	18.977	18.912	87.579	1.00	27.87		O
ANISOU	2474	O	HOH	55	3544	3404	3643	-56	83	537	O
HETATM	2475	O	HOH	56	19.846	27.021	58.540	1.00	28.71		O
ANISOU	2475	O	HOH	56	3192	4150	3565	-46	62	-102	O

HETATM	2476	O	HOH	57	18.893	38.381	68.300	1.00	39.18		O
ANISOU	2476	O	HOH	57	4835	5065	4988	-169	-131	302	O
HETATM	2477	O	HOH	58	6.902	8.651	82.704	1.00	28.45		O
ANISOU	2477	O	HOH	58	3411	3330	4067	-392	-302	113	O
HETATM	2478	O	HOH	59	17.849	16.715	86.154	1.00	29.54		O
ANISOU	2478	O	HOH	59	4120	3029	4077	-328	-270	384	O
HETATM	2479	O	HOH	60	33.565	14.842	76.735	1.00	27.80		O
ANISOU	2479	O	HOH	60	3718	2775	4069	220	139	28	O
HETATM	2480	O	HOH	61	31.434	37.317	86.923	1.00	29.54		O
ANISOU	2480	O	HOH	61	3467	4223	3531	-245	94	-71	O
HETATM	2481	O	HOH	63	8.212	24.757	92.578	1.00	33.84		O
ANISOU	2481	O	HOH	63	4422	4549	3887	-317	446	186	O
HETATM	2482	O	HOH	64	0.341	17.389	87.409	1.00	34.12		O
ANISOU	2482	O	HOH	64	4047	4436	4479	74	64	41	O
HETATM	2483	O	HOH	65	10.728	32.643	83.333	1.00	37.65		O
ANISOU	2483	O	HOH	65	4696	4580	5031	119	45	-165	O
HETATM	2484	O	HOH	66	25.977	41.295	79.529	1.00	38.48		O
ANISOU	2484	O	HOH	66	5182	4385	5052	10	-70	-13	O
HETATM	2485	O	HOH	67	-0.519	21.247	80.668	1.00	31.77		O
ANISOU	2485	O	HOH	67	3778	4088	4207	-6	141	-23	O
HETATM	2486	O	HOH	68	33.932	36.444	83.268	1.00	36.90		O
ANISOU	2486	O	HOH	68	4722	4842	4454	22	-181	-382	O
HETATM	2487	O	HOH	69	32.361	16.072	82.512	1.00	27.55		O
ANISOU	2487	O	HOH	69	3814	3115	3538	166	-85	-130	O
HETATM	2488	O	HOH	70	27.479	37.182	71.425	1.00	37.05		O
ANISOU	2488	O	HOH	70	5266	4168	4644	-49	94	223	O
HETATM	2489	O	HOH	71	5.892	25.721	64.244	1.00	31.68		O
ANISOU	2489	O	HOH	71	3672	4354	4009	-46	27	158	O
HETATM	2490	O	HOH	72	0.863	30.898	72.470	1.00	29.17		O
ANISOU	2490	O	HOH	72	3748	3817	3519	230	-173	-465	O
HETATM	2491	O	HOH	73	13.237	26.756	96.337	1.00	44.81		O
ANISOU	2491	O	HOH	73	5592	5719	5716	-119	125	4	O
HETATM	2492	O	HOH	74	25.614	12.403	81.897	1.00	32.99		O
ANISOU	2492	O	HOH	74	4047	4097	4391	273	-49	-168	O
HETATM	2493	O	HOH	75	0.392	7.960	83.650	1.00	44.90		O
ANISOU	2493	O	HOH	75	5506	5674	5881	-144	20	-128	O
HETATM	2494	O	HOH	76	2.842	20.053	90.559	1.00	33.42		O
ANISOU	2494	O	HOH	76	3790	4365	4544	-40	373	370	O
HETATM	2495	O	HOH	77	25.802	32.864	63.405	1.00	46.37		O
ANISOU	2495	O	HOH	77	6051	5780	5787	-48	51	212	O
HETATM	2496	O	HOH	78	20.698	17.182	89.026	1.00	28.05		O
ANISOU	2496	O	HOH	78	3497	3500	3659	76	72	370	O
HETATM	2497	O	HOH	79	27.986	17.672	91.656	1.00	35.19		O
ANISOU	2497	O	HOH	79	4901	3943	4528	90	-56	268	O
HETATM	2498	O	HOH	80	11.471	31.449	72.256	1.00	33.07		O
ANISOU	2498	O	HOH	80	3849	4128	4589	-305	-439	-386	O
HETATM	2499	O	HOH	81	17.541	19.065	35.838	1.00	36.53		O
ANISOU	2499	O	HOH	81	4680	4456	4742	-25	134	234	O
HETATM	2500	O	HOH	82	7.860	6.828	80.738	1.00	33.81		O
ANISOU	2500	O	HOH	82	4453	3990	4403	-357	-60	289	O
HETATM	2501	O	HOH	83	21.768	27.779	60.354	1.00	40.60		O
ANISOU	2501	O	HOH	83	4890	5315	5222	82	-54	-47	O
HETATM	2502	O	HOH	84	32.064	37.367	89.481	1.00	41.76		O
ANISOU	2502	O	HOH	84	5354	5268	5244	-7	-99	147	O
HETATM	2503	O	HOH	85	8.503	9.586	67.648	1.00	35.02		O
ANISOU	2503	O	HOH	85	4560	4198	4548	-151	-92	-68	O
HETATM	2504	O	HOH	86	35.055	16.029	80.808	1.00	30.32		O
ANISOU	2504	O	HOH	86	4584	3294	3640	-45	233	-30	O
HETATM	2505	O	HOH	87	6.989	13.177	66.266	1.00	33.80		O
ANISOU	2505	O	HOH	87	4125	3818	4898	-251	-63	-11	O
HETATM	2506	O	HOH	88	15.003	28.045	97.998	1.00	51.17		O
ANISOU	2506	O	HOH	88	6357	6627	6457	16	-15	-2	O
HETATM	2507	O	HOH	89	29.907	36.459	67.348	1.00	31.26		O
ANISOU	2507	O	HOH	89	4265	3612	3999	-117	198	-44	O

HETATM	2508	O	HOH	90	10.674	27.500	42.469	1.00	43.25		O
ANISOU	2508	O	HOH	90	5645	5598	5190	95	86	-41	O
HETATM	2509	O	HOH	92	20.274	18.178	70.165	1.00	30.26		O
ANISOU	2509	O	HOH	92	3601	4289	3606	-159	23	-276	O
HETATM	2510	O	HOH	93	32.384	22.940	91.171	1.00	32.02		O
ANISOU	2510	O	HOH	93	3973	4057	4137	-113	-116	510	O
HETATM	2511	O	HOH	94	12.207	36.458	58.100	1.00	45.11		O
ANISOU	2511	O	HOH	94	5761	5563	5814	-38	46	-39	O
HETATM	2512	O	HOH	95	27.430	27.136	93.699	1.00	40.85		O
ANISOU	2512	O	HOH	95	5177	5242	5102	21	50	42	O
HETATM	2513	O	HOH	97	37.831	29.448	86.376	1.00	30.88		O
ANISOU	2513	O	HOH	97	4017	3710	4008	-175	-67	35	O
HETATM	2514	O	HOH	98	15.240	18.925	66.709	1.00	38.00		O
ANISOU	2514	O	HOH	98	4994	4738	4706	-7	-242	176	O
HETATM	2515	O	HOH	99	5.829	19.721	64.048	1.00	35.79		O
ANISOU	2515	O	HOH	99	4801	4416	4380	-274	19	66	O
HETATM	2516	O	HOH	101	6.090	6.593	72.934	1.00	39.21		O
ANISOU	2516	O	HOH	101	5096	4609	5195	-199	-38	-118	O
HETATM	2517	O	HOH	102	26.208	34.093	92.270	1.00	34.48		O
ANISOU	2517	O	HOH	102	4658	4274	4169	10	-114	-190	O
HETATM	2518	O	HOH	103	19.304	37.782	81.584	1.00	42.00		O
ANISOU	2518	O	HOH	103	5191	5317	5451	114	35	0	O
HETATM	2519	O	HOH	104	10.583	32.305	86.587	1.00	39.73		O
ANISOU	2519	O	HOH	104	4880	4948	5265	115	208	-302	O
HETATM	2520	O	HOH	105	4.086	7.006	74.602	1.00	42.19		O
ANISOU	2520	O	HOH	105	5191	5231	5610	-135	-123	-43	O
HETATM	2521	O	HOH	106	36.699	40.392	83.292	1.00	44.11		O
ANISOU	2521	O	HOH	106	5779	5365	5616	119	20	287	O
HETATM	2522	O	HOH	107	17.276	37.421	90.299	1.00	40.27		O
ANISOU	2522	O	HOH	107	5148	4767	5385	-33	-7	-97	O
HETATM	2523	O	HOH	108	30.148	37.356	69.897	1.00	35.36		O
ANISOU	2523	O	HOH	108	4787	4293	4354	-46	184	242	O
HETATM	2524	O	HOH	109	20.050	11.270	82.593	1.00	30.97		O
ANISOU	2524	O	HOH	109	3907	3736	4126	-397	-192	-331	O
HETATM	2525	O	HOH	110	32.982	18.621	61.866	1.00	40.10		O
ANISOU	2525	O	HOH	110	5006	5145	5083	-75	-7	-109	O
HETATM	2526	O	HOH	111	31.183	44.426	71.705	1.00	38.92		O
ANISOU	2526	O	HOH	111	5834	4043	4912	117	-199	-112	O
HETATM	2527	O	HOH	112	19.410	35.437	91.026	1.00	31.27		O
ANISOU	2527	O	HOH	112	4105	3674	4102	20	-307	-1	O
HETATM	2528	O	HOH	113	10.508	34.816	74.376	1.00	35.06		O
ANISOU	2528	O	HOH	113	4113	4123	5085	46	-303	5	O
HETATM	2529	O	HOH	114	-1.049	11.092	82.134	1.00	40.12		O
ANISOU	2529	O	HOH	114	4844	4782	5618	-315	69	-108	O
HETATM	2530	O	HOH	115	19.897	5.671	74.532	1.00	36.57		O
ANISOU	2530	O	HOH	115	5109	4121	4665	66	99	-313	O
HETATM	2531	O	HOH	116	12.797	36.998	68.353	1.00	44.20		O
ANISOU	2531	O	HOH	116	5407	5654	5732	-9	11	-23	O
HETATM	2532	O	HOH	117	37.204	16.913	77.312	1.00	42.42		O
ANISOU	2532	O	HOH	117	5547	5241	5330	35	136	-64	O
HETATM	2533	O	HOH	118	24.098	26.614	55.883	1.00	46.04		O
ANISOU	2533	O	HOH	118	5820	5869	5803	-112	-31	92	O
HETATM	2534	O	HOH	119	9.740	7.380	78.924	1.00	35.49		O
ANISOU	2534	O	HOH	119	4494	4049	4943	-286	-98	-193	O
HETATM	2535	O	HOH	120	26.325	10.188	80.789	1.00	36.65		O
ANISOU	2535	O	HOH	120	4396	4867	4661	-85	174	-265	O
HETATM	2536	O	HOH	121	24.800	8.376	81.628	1.00	36.20		O
ANISOU	2536	O	HOH	121	4413	4540	4803	33	-114	-123	O
HETATM	2537	O	HOH	122	0.529	25.300	65.097	1.00	30.84		O
ANISOU	2537	O	HOH	122	4482	3825	3412	-21	85	5	O
HETATM	2538	O	HOH	123	16.009	22.094	95.421	1.00	37.78		O
ANISOU	2538	O	HOH	123	4667	5104	4586	-25	39	87	O
HETATM	2539	O	HOH	124	42.684	19.628	77.757	1.00	34.07		O
ANISOU	2539	O	HOH	124	4309	4247	4388	254	-218	92	O

HETATM	2540	O	HOH	125	35.783	23.733	86.601	1.00	36.64		O
ANISOU	2540	O	HOH	125	4533	4858	4530	67	-40	-85	O
HETATM	2541	O	HOH	126	21.796	40.661	81.020	1.00	29.22		O
ANISOU	2541	O	HOH	126	4192	3615	3294	121	-111	-252	O
HETATM	2542	O	HOH	127	19.560	40.153	79.738	1.00	34.02		O
ANISOU	2542	O	HOH	127	4065	4328	4535	11	243	-240	O
HETATM	2543	O	HOH	128	24.074	40.355	87.308	1.00	36.13		O
ANISOU	2543	O	HOH	128	4930	4116	4679	-9	40	-138	O
HETATM	2544	O	HOH	129	9.039	32.249	66.343	1.00	32.45		O
ANISOU	2544	O	HOH	129	3876	4369	4085	79	91	152	O
HETATM	2545	O	HOH	130	12.440	34.199	86.784	1.00	39.42		O
ANISOU	2545	O	HOH	130	4746	5219	5013	65	187	-163	O
HETATM	2546	O	HOH	132	18.577	41.151	72.469	1.00	40.69		O
ANISOU	2546	O	HOH	132	5132	5116	5212	-131	38	175	O
HETATM	2547	O	HOH	133	26.035	17.547	59.645	1.00	37.43		O
ANISOU	2547	O	HOH	133	4588	4901	4733	41	-7	-48	O
HETATM	2548	O	HOH	134	6.841	27.863	88.767	1.00	43.13		O
ANISOU	2548	O	HOH	134	5586	5488	5312	-99	-198	85	O
HETATM	2549	O	HOH	135	5.747	24.462	60.265	1.00	31.64		O
ANISOU	2549	O	HOH	135	3794	4365	3864	-157	-132	-29	O
HETATM	2550	O	HOH	136	5.347	31.806	46.511	1.00	34.07		O
ANISOU	2550	O	HOH	136	4493	4356	4098	306	-297	88	O
HETATM	2551	O	HOH	137	22.102	8.719	85.540	1.00	35.29		O
ANISOU	2551	O	HOH	137	4212	4737	4457	-50	118	-7	O
HETATM	2552	O	HOH	138	21.348	33.060	45.448	1.00	50.48		O
ANISOU	2552	O	HOH	138	6358	6409	6412	-24	89	-14	O
HETATM	2553	O	HOH	139	21.196	38.672	66.903	1.00	38.48		O
ANISOU	2553	O	HOH	139	4950	4534	5139	-44	180	282	O
HETATM	2554	O	HOH	140	19.595	17.890	37.318	1.00	42.21		O
ANISOU	2554	O	HOH	140	5649	5133	5254	-91	9	18	O
HETATM	2555	O	HOH	141	17.506	17.570	66.106	1.00	46.57		O
ANISOU	2555	O	HOH	141	5703	6043	5950	-156	-14	-25	O
HETATM	2556	O	HOH	142	37.768	20.451	86.955	1.00	39.70		O
ANISOU	2556	O	HOH	142	4699	5282	5103	57	-225	95	O
HETATM	2557	O	HOH	144	20.596	25.321	45.223	1.00	40.73		O
ANISOU	2557	O	HOH	144	5073	5370	5033	60	83	12	O
HETATM	2558	O	HOH	145	24.915	20.661	59.526	1.00	32.65		O
ANISOU	2558	O	HOH	145	4431	4051	3925	-44	-70	-36	O
HETATM	2559	O	HOH	146	23.130	25.120	59.370	1.00	32.05		O
ANISOU	2559	O	HOH	146	3775	4339	4063	220	207	83	O
HETATM	2560	O	HOH	147	15.211	22.046	92.930	1.00	38.03		O
ANISOU	2560	O	HOH	147	4653	4976	4819	5	-16	221	O
HETATM	2561	O	HOH	148	3.874	5.766	77.070	1.00	45.93		O
ANISOU	2561	O	HOH	148	5735	5794	5921	146	-74	72	O
HETATM	2562	O	HOH	149	39.692	16.148	81.822	1.00	42.50		O
ANISOU	2562	O	HOH	149	5244	5204	5700	150	-53	7	O
HETATM	2563	O	HOH	150	28.544	29.691	94.309	1.00	45.60		O
ANISOU	2563	O	HOH	150	5856	5761	5709	-69	12	11	O
HETATM	2564	O	HOH	151	15.761	28.212	88.984	1.00	33.46		O
ANISOU	2564	O	HOH	151	4658	4153	3901	-163	268	362	O
HETATM	2565	O	HOH	152	3.456	35.442	52.303	1.00	40.94		O
ANISOU	2565	O	HOH	152	5075	5208	5272	260	-207	13	O
HETATM	2566	O	HOH	153	38.432	31.309	63.732	1.00	54.84		O
ANISOU	2566	O	HOH	153	6983	6977	6877	87	-54	-132	O
HETATM	2567	O	HOH	154	45.567	30.031	75.704	1.00	48.83		O
ANISOU	2567	O	HOH	154	6039	6212	6304	-60	37	-69	O
HETATM	2568	O	HOH	155	5.351	7.890	70.467	1.00	34.90		O
ANISOU	2568	O	HOH	155	4391	4202	4666	-41	-141	-86	O
HETATM	2569	O	HOH	156	5.248	12.467	63.713	1.00	49.93		O
ANISOU	2569	O	HOH	156	6398	6210	6364	-98	-91	-20	O
HETATM	2570	O	HOH	157	19.804	12.771	80.652	1.00	38.88		O
ANISOU	2570	O	HOH	157	4912	4876	4986	-111	-2	-195	O
HETATM	2571	O	HOH	158	24.298	27.085	62.174	1.00	37.61		O
ANISOU	2571	O	HOH	158	5032	4699	4558	209	198	5	O

HETATM	2572	O	HOH	159	-2.754	18.937	70.168	1.00	49.15		O
ANISOU	2572	O	HOH	159	6055	6297	6322	135	-27	-66	O
HETATM	2573	O	HOH	160	20.325	9.737	74.178	1.00	33.76		O
ANISOU	2573	O	HOH	160	4095	4137	4594	-44	180	-237	O
HETATM	2574	O	HOH	161	4.663	27.190	59.648	1.00	44.33		O
ANISOU	2574	O	HOH	161	5691	5924	5227	128	-4	114	O
HETATM	2575	O	HOH	162	36.688	13.560	67.532	1.00	45.15		O
ANISOU	2575	O	HOH	162	5819	5609	5729	-39	5	64	O
HETATM	2576	O	HOH	163	17.051	29.122	91.358	1.00	43.44		O
ANISOU	2576	O	HOH	163	5359	5484	5663	-185	60	22	O
HETATM	2577	O	HOH	164	19.304	17.699	64.312	1.00	34.62		O
ANISOU	2577	O	HOH	164	4486	4139	4530	8	46	-91	O
HETATM	2578	O	HOH	165	4.437	33.730	48.186	1.00	44.78		O
ANISOU	2578	O	HOH	165	5530	5789	5697	192	-103	47	O
HETATM	2579	O	HOH	166	19.582	15.633	67.366	1.00	39.27		O
ANISOU	2579	O	HOH	166	5095	4943	4884	41	307	-86	O
HETATM	2580	O	HOH	167	3.313	25.443	63.514	1.00	35.90		O
ANISOU	2580	O	HOH	167	4498	4592	4549	4	-51	116	O
HETATM	2581	O	HOH	168	29.036	33.803	92.215	1.00	37.42		O
ANISOU	2581	O	HOH	168	4880	4260	5077	229	-77	84	O
HETATM	2582	O	HOH	169	27.439	37.535	67.031	1.00	49.94		O
ANISOU	2582	O	HOH	169	6490	6199	6285	67	81	45	O
HETATM	2583	O	HOH	170	39.359	22.141	64.730	1.00	39.59		O
ANISOU	2583	O	HOH	170	4994	4958	5090	-66	172	89	O
HETATM	2584	O	HOH	171	2.618	29.140	76.067	1.00	40.90		O
ANISOU	2584	O	HOH	171	5201	5034	5304	72	-24	42	O
HETATM	2585	O	HOH	172	19.141	42.727	78.598	1.00	44.77		O
ANISOU	2585	O	HOH	172	5768	5454	5789	104	93	-108	O
HETATM	2586	O	HOH	173	26.708	12.693	66.306	1.00	51.60		O
ANISOU	2586	O	HOH	173	6466	6618	6521	-185	-11	-61	O
HETATM	2587	O	HOH	174	14.550	4.591	79.369	1.00	54.16		O
ANISOU	2587	O	HOH	174	6803	6773	7001	24	-63	39	O
HETATM	2588	O	HOH	175	3.502	23.110	48.771	1.00	45.77		O
ANISOU	2588	O	HOH	175	5770	5943	5677	-13	-56	-2	O
HETATM	2589	O	HOH	176	21.028	19.774	93.260	1.00	35.01		O
ANISOU	2589	O	HOH	176	4493	4631	4180	-114	312	224	O
HETATM	2590	O	HOH	177	37.317	15.925	74.887	1.00	47.41		O
ANISOU	2590	O	HOH	177	6282	5883	5849	146	-6	-112	O
HETATM	2591	O	HOH	178	5.970	20.098	57.147	1.00	43.65		O
ANISOU	2591	O	HOH	178	5579	5670	5334	112	-43	188	O
HETATM	2592	O	HOH	180	31.762	9.526	70.915	1.00	42.55		O
ANISOU	2592	O	HOH	180	5672	5064	5430	-172	83	105	O
HETATM	2593	O	HOH	181	47.822	24.554	70.761	1.00	41.72		O
ANISOU	2593	O	HOH	181	5177	5233	5440	136	63	-20	O
HETATM	2594	O	HOH	182	26.734	24.919	50.172	1.00	52.79		O
ANISOU	2594	O	HOH	182	6486	6848	6723	28	117	23	O
HETATM	2595	O	HOH	183	32.925	11.685	69.753	1.00	42.43		O
ANISOU	2595	O	HOH	183	5774	4874	5474	65	-12	-10	O
HETATM	2596	O	HOH	184	18.971	15.202	87.889	1.00	38.16		O
ANISOU	2596	O	HOH	184	4719	4617	5163	37	175	-86	O
HETATM	2597	O	HOH	185	35.218	26.224	90.859	1.00	49.60		O
ANISOU	2597	O	HOH	185	6211	6225	6412	-62	76	80	O
HETATM	2598	O	HOH	186	5.227	24.542	47.195	1.00	43.45		O
ANISOU	2598	O	HOH	186	5439	5733	5336	59	4	7	O
HETATM	2599	O	HOH	187	39.009	31.723	80.027	1.00	34.64		O
ANISOU	2599	O	HOH	187	4598	4576	3987	-233	-35	-224	O
HETATM	2600	O	HOH	188	42.214	26.523	66.397	1.00	42.66		O
ANISOU	2600	O	HOH	188	5557	5491	5160	179	231	-83	O
HETATM	2601	O	HOH	189	17.465	32.770	93.454	1.00	51.95		O
ANISOU	2601	O	HOH	189	6708	6623	6405	16	138	95	O
HETATM	2602	O	HOH	190	8.735	15.447	39.420	1.00	54.50		O
ANISOU	2602	O	HOH	190	6832	6858	7019	0	-35	6	O
HETATM	2603	O	HOH	191	-2.607	20.239	72.368	1.00	40.07		O
ANISOU	2603	O	HOH	191	4840	5063	5323	14	141	81	O

HETATM	2604	O	HOH	193	33.794	37.511	70.614	1.00	42.65		O
ANISOU	2604	O	HOH	193	5608	5288	5308	145	-43	-58	O
HETATM	2605	O	HOH	195	3.507	13.927	50.971	1.00	59.90		O
ANISOU	2605	O	HOH	195	7570	7678	7511	0	2	8	O
HETATM	2606	O	HOH	196	-4.736	20.639	73.512	1.00	40.93		O
ANISOU	2606	O	HOH	196	5209	4993	5352	-36	-222	85	O
HETATM	2607	O	HOH	197	26.092	19.633	55.216	1.00	51.00		O
ANISOU	2607	O	HOH	197	6169	6535	6675	44	-10	-122	O
HETATM	2608	O	HOH	198	23.781	30.889	93.836	1.00	32.97		O
ANISOU	2608	O	HOH	198	4468	4241	3820	-47	-78	114	O
HETATM	2609	O	HOH	200	21.093	30.159	56.807	1.00	52.30		O
ANISOU	2609	O	HOH	200	6449	6810	6614	70	103	-34	O
HETATM	2610	O	HOH	201	6.287	28.496	61.060	1.00	47.40		O
ANISOU	2610	O	HOH	201	6270	5946	5795	178	56	-66	O
HETATM	2611	O	HOH	202	-1.544	13.525	70.641	1.00	37.09		O
ANISOU	2611	O	HOH	202	4297	4780	5016	-377	-349	-40	O
HETATM	2612	O	HOH	203	7.553	20.917	60.941	1.00	47.92		O
ANISOU	2612	O	HOH	203	5823	6106	6279	-110	66	-11	O
HETATM	2613	O	HOH	204	17.614	21.404	91.766	1.00	39.24		O
ANISOU	2613	O	HOH	204	4982	4967	4958	-68	115	139	O
HETATM	2614	O	HOH	205	3.511	31.591	63.721	1.00	50.48		O
ANISOU	2614	O	HOH	205	6487	6369	6325	132	-63	48	O
HETATM	2615	O	HOH	206	32.461	39.367	68.538	1.00	60.12		O
ANISOU	2615	O	HOH	206	7617	7556	7670	25	-55	-82	O
HETATM	2616	O	HOH	207	27.566	32.440	60.770	1.00	45.93		O
ANISOU	2616	O	HOH	207	5774	5890	5788	-5	-119	49	O
HETATM	2617	O	HOH	208	17.698	37.711	66.116	1.00	40.56		O
ANISOU	2617	O	HOH	208	5267	4922	5224	87	46	245	O
HETATM	2618	O	HOH	209	1.483	26.616	79.265	1.00	54.08		O
ANISOU	2618	O	HOH	209	6873	6913	6760	-24	39	66	O
HETATM	2619	O	HOH	210	42.034	27.866	63.967	1.00	56.30		O
ANISOU	2619	O	HOH	210	7077	7232	7083	108	36	-14	O
HETATM	2620	O	HOH	211	43.429	19.817	70.829	1.00	50.34		O
ANISOU	2620	O	HOH	211	6362	6386	6381	14	-97	-26	O
HETATM	2621	O	HOH	212	37.808	23.533	62.993	1.00	40.32		O
ANISOU	2621	O	HOH	212	4939	5295	5086	-122	154	-65	O
HETATM	2622	O	HOH	213	43.082	31.381	78.491	1.00	56.01		O
ANISOU	2622	O	HOH	213	7107	7033	7141	-44	-49	-85	O
HETATM	2623	O	HOH	215	11.830	4.624	80.523	1.00	55.43		O
ANISOU	2623	O	HOH	215	6901	6996	7162	-35	-13	76	O
HETATM	2624	O	HOH	216	15.166	16.314	86.736	1.00	38.36		O
ANISOU	2624	O	HOH	216	4438	5215	4921	-232	43	30	O
HETATM	2625	O	HOH	217	36.377	16.002	72.427	1.00	35.99		O
ANISOU	2625	O	HOH	217	5335	3766	4575	-14	-14	33	O
HETATM	2626	O	HOH	218	-1.373	11.869	79.645	1.00	41.53		O
ANISOU	2626	O	HOH	218	4912	5117	5751	-296	-120	20	O
HETATM	2627	O	HOH	219	-3.379	16.353	86.986	1.00	45.74		O
ANISOU	2627	O	HOH	219	5715	5830	5833	85	17	-43	O
HETATM	2628	O	HOH	220	2.091	6.405	72.737	1.00	50.82		O
ANISOU	2628	O	HOH	220	6364	6358	6589	-22	-48	13	O
HETATM	2629	O	HOH	221	2.920	10.850	69.175	1.00	45.38		O
ANISOU	2629	O	HOH	221	5809	5558	5877	-19	-81	-71	O
HETATM	2630	O	HOH	222	5.981	25.400	90.850	1.00	57.36		O
ANISOU	2630	O	HOH	222	7302	7230	7264	43	55	-27	O
HETATM	2631	O	HOH	224	16.947	25.759	97.908	1.00	45.97		O
ANISOU	2631	O	HOH	224	5585	6066	5815	81	93	-5	O
HETATM	2632	O	HOH	225	19.414	21.824	39.526	1.00	53.64		O
ANISOU	2632	O	HOH	225	6777	6754	6848	-44	50	-87	O
HETATM	2633	O	HOH	226	1.800	25.637	74.624	1.00	40.30		O
ANISOU	2633	O	HOH	226	4930	5253	5128	-148	144	-70	O
HETATM	2634	O	HOH	227	23.269	14.956	55.180	1.00	48.49		O
ANISOU	2634	O	HOH	227	6018	6304	6101	89	-65	-63	O
HETATM	2635	O	HOH	228	18.568	32.106	45.086	1.00	45.28		O
ANISOU	2635	O	HOH	228	5629	5870	5706	135	119	94	O

HETATM	2636	O	HOH	229	18.157	28.244	94.243	1.00	43.77		
ANISOU	2636	O	HOH	229	5417	5624	5591	14	-48	-195	
HETATM	2637	O	HOH	231	3.941	5.319	83.232	1.00	58.77		
ANISOU	2637	O	HOH	231	7480	7292	7557	-68	-12	33	
HETATM	2638	O	HOH	233	23.872	43.243	83.729	1.00	49.18		
ANISOU	2638	O	HOH	233	6397	6031	6259	-26	20	45	
HETATM	2639	O	HOH	234	5.807	35.953	86.478	1.00	39.50		
ANISOU	2639	O	HOH	234	5214	4636	5158	168	-47	-181	
HETATM	2640	O	HOH	235	-1.318	9.821	84.486	1.00	62.05		
ANISOU	2640	O	HOH	235	7811	7836	7927	-63	-30	13	
HETATM	2641	O	HOH	236	1.804	32.375	90.178	1.00	56.49		
ANISOU	2641	O	HOH	236	7043	7190	7232	-12	-52	5	
HETATM	2642	O	HOH	237	-0.925	21.448	82.987	1.00	39.99		
ANISOU	2642	O	HOH	237	4850	5256	5088	-36	-37	75	
HETATM	2643	O	HOH	239	2.879	8.457	71.154	1.00	47.58		
ANISOU	2643	O	HOH	239	6000	5881	6197	-102	-52	-53	
HETATM	2644	O	HOH	240	18.732	39.891	89.712	1.00	45.92		
ANISOU	2644	O	HOH	240	5949	5499	5997	25	-30	-26	
HETATM	2645	O	HOH	241	25.660	28.109	50.609	1.00	51.03		
ANISOU	2645	O	HOH	241	6333	6478	6578	-120	99	67	
HETATM	2646	O	HOH	244	38.699	32.712	88.082	1.00	56.52		
ANISOU	2646	O	HOH	244	7097	7278	7100	-62	6	26	
HETATM	2647	O	HOH	245	18.200	11.032	69.905	1.00	55.67		
ANISOU	2647	O	HOH	245	7037	7069	7046	47	-6	-62	
HETATM	2648	O	HOH	247	6.266	30.766	77.520	1.00	35.27		
ANISOU	2648	O	HOH	247	4116	4315	4970	335	103	-7	
HETATM	2649	O	HOH	248	10.443	35.367	90.850	1.00	38.88		
ANISOU	2649	O	HOH	248	4926	4982	4866	-35	46	-99	
HETATM	2650	O	HOH	249	34.849	11.886	63.661	1.00	58.13		
ANISOU	2650	O	HOH	249	7371	7310	7407	12	-53	-1	
HETATM	2651	O	HOH	250	-0.751	29.875	55.099	1.00	52.77		
ANISOU	2651	O	HOH	250	6498	6850	6703	-17	61	16	
HETATM	2652	O	HOH	251	39.775	29.228	84.737	1.00	44.55		
ANISOU	2652	O	HOH	251	5394	5624	5909	-51	-95	5	
HETATM	2653	O	HOH	252	8.905	31.517	73.237	1.00	31.68		
ANISOU	2653	O	HOH	252	3599	4161	4276	-13	-92	199	
HETATM	2654	O	HOH	253	5.904	5.392	79.575	1.00	44.36		
ANISOU	2654	O	HOH	253	5611	5491	5754	-110	117	-17	
HETATM	2655	O	HOH	254	2.593	27.491	57.553	1.00	61.05		
ANISOU	2655	O	HOH	254	7747	7802	7645	56	-70	19	
HETATM	2656	O	HOH	255	-3.034	6.388	73.651	1.00	41.01		
ANISOU	2656	O	HOH	255	5096	5113	5373	-260	-71	37	
HETATM	2657	O	HOH								

HETATM	2668	O	HOH	269	-3.983	4.553	75.511	1.00	45.68		O
ANISOU	2668	O	HOH	269	5671	5698	5986	-289	4	-5	O
HETATM	2669	O	HOH	271	13.110	14.292	49.307	1.00	45.73		O
ANISOU	2669	O	HOH	271	5983	5656	5736	-77	-50	33	O
HETATM	2670	O	HOH	272	42.217	40.987	61.064	1.00	53.96		O
ANISOU	2670	O	HOH	272	6816	6807	6881	-17	122	51	O
HETATM	2671	O	HOH	275	12.958	16.271	89.687	1.00	43.25		O
ANISOU	2671	O	HOH	275	5298	5959	5177	-38	-58	56	O
HETATM	2672	O	HOH	276	11.965	39.155	72.079	1.00	50.64		O
ANISOU	2672	O	HOH	276	6286	6367	6587	112	-100	64	O
HETATM	2673	O	HOH	277	9.049	30.831	62.655	1.00	47.51		O
ANISOU	2673	O	HOH	277	6061	6117	5874	153	5	102	O
HETATM	2674	O	HOH	278	9.061	6.885	65.879	1.00	43.84		O
ANISOU	2674	O	HOH	278	5708	5580	5369	54	26	18	O
HETATM	2675	O	HOH	279	1.893	21.504	45.817	1.00	48.78		O
ANISOU	2675	O	HOH	279	6098	6288	6147	7	-27	-3	O
HETATM	2676	O	HOH	280	1.013	12.641	69.012	1.00	49.73		O
ANISOU	2676	O	HOH	280	6300	6303	6293	-126	-43	-107	O
HETATM	2677	O	HOH	281	14.132	37.787	79.490	1.00	49.34		O
ANISOU	2677	O	HOH	281	6249	6187	6310	-48	-42	-24	O
HETATM	2678	O	HOH	282	7.234	0.526	73.102	1.00	51.30		O
ANISOU	2678	O	HOH	282	6480	6538	6475	-60	31	-25	O
HETATM	2679	O	HOH	283	22.529	36.575	90.833	1.00	47.07		O
ANISOU	2679	O	HOH	283	6104	5905	5876	48	110	-60	O
HETATM	2680	O	HOH	286	6.203	3.972	71.037	1.00	52.76		O
ANISOU	2680	O	HOH	286	6773	6651	6623	-66	-34	43	O
HETATM	2681	O	HOH	289	-0.581	5.056	73.095	1.00	50.24		O
ANISOU	2681	O	HOH	289	6408	6252	6429	-101	43	-4	O
HETATM	2682	O	HOH	291	-0.277	21.778	87.867	1.00	37.37		O
ANISOU	2682	O	HOH	291	4444	4901	4852	104	38	69	O
HETATM	2683	O	HOH	292	41.325	35.485	71.099	1.00	49.29		O
ANISOU	2683	O	HOH	292	6371	6092	6266	-77	-46	-19	O
HETATM	2684	O	HOH	293	22.034	25.987	94.557	1.00	51.03		O
ANISOU	2684	O	HOH	293	6425	6680	6286	29	7	63	O
HETATM	2685	O	HOH	296	13.954	18.398	88.090	1.00	61.76		O
ANISOU	2685	O	HOH	296	7894	7807	7766	-32	-1	7	O
HETATM	2686	O	HOH	297	5.168	21.726	59.978	1.00	59.61		O
ANISOU	2686	O	HOH	297	7643	7504	7501	22	-82	51	O
HETATM	2687	O	HOH	298	26.854	21.908	50.588	1.00	61.24		O
ANISOU	2687	O	HOH	298	7736	7772	7759	80	49	-68	O
HETATM	2688	O	HOH	299	27.672	38.514	93.272	1.00	49.59		O
ANISOU	2688	O	HOH	299	6503	6079	6259	5	4	-47	O
HETATM	2689	O	HOH	301	21.230	36.993	82.820	1.00	47.70		O
ANISOU	2689	O	HOH	301	6164	5938	6023	54	134	-6	O
HETATM	2690	O	HOH	302	15.478	14.274	42.122	1.00	43.47		O
ANISOU	2690	O	HOH	302	5474	5495	5548	66	18	-21	O
HETATM	2691	O	HOH	303	-5.338	15.977	71.954	1.00	60.72		O
ANISOU	2691	O	HOH	303	7619	7722	7728	-3	-6	49	O
HETATM	2692	O	HOH	304	42.752	16.703	75.054	1.00	48.53		O
ANISOU	2692	O	HOH	304	6214	6081	6144	106	-20	-78	O
HETATM	2693	O	HOH	305	23.884	14.130	69.347	1.00	48.88		O
ANISOU	2693	O	HOH	305	6421	5890	6261	43	-144	-18	O
HETATM	2694	O	HOH	306	12.506	36.009	89.034	1.00	47.42		O
ANISOU	2694	O	HOH	306	5895	5874	6249	-27	41	-55	O
HETATM	2695	O	HOH	307	25.553	43.200	77.760	1.00	57.49		O
ANISOU	2695	O	HOH	307	7410	7119	7314	63	91	7	O
HETATM	2696	O	HOH	308	25.024	31.642	61.021	1.00	47.12		O
ANISOU	2696	O	HOH	308	5903	6069	5933	67	50	51	O
HETATM	2697	O	HOH	309	18.987	13.289	90.654	1.00	56.32		O
ANISOU	2697	O	HOH	309	7081	7156	7162	-43	33	-52	O
HETATM	2698	O	HOH	311	12.450	34.857	60.508	1.00	47.50		O
ANISOU	2698	O	HOH	311	6100	6005	5941	-22	-64	-27	O
HETATM	2699	O	HOH	313	6.929	37.243	50.936	1.00	53.63		O
ANISOU	2699	O	HOH	313	6873	6781	6723	-7	5	50	O

HETATM	2700	O	HOH	314	33.831	42.307	68.854	1.00	53.16			O
ANISOU	2700	O	HOH	314	6806	6825	6567	92	7	-31		O
HETATM	2701	O	HOH	315	34.967	27.827	55.837	1.00	56.21			O
ANISOU	2701	O	HOH	315	7214	7170	6972	-42	114	-22		O
HETATM	2702	O	HOH	317	19.424	25.271	42.768	1.00	42.58			O
ANISOU	2702	O	HOH	317	5366	5677	5137	74	-53	53		O
HETATM	2703	O	HOH	318	40.816	32.777	78.372	1.00	46.80			O
ANISOU	2703	O	HOH	318	6113	5558	6113	-105	7	-5		O
HETATM	2704	O	HOH	319	2.161	14.590	46.878	1.00	59.54			O
ANISOU	2704	O	HOH	319	7579	7458	7584	-25	-34	-65		O
HETATM	2705	O	HOH	321	3.078	17.075	42.925	1.00	62.62			O
ANISOU	2705	O	HOH	321	7933	7873	7985	-12	38	-32		O
HETATM	2706	O	HOH	322	4.695	27.583	93.438	1.00	67.19			O
ANISOU	2706	O	HOH	322	8512	8561	8457	-20	23	17		O
HETATM	2707	O	HOH	323	6.865	14.509	55.845	1.00	56.89			O
ANISOU	2707	O	HOH	323	7303	7201	7110	-18	3	-10		O
HETATM	2708	O	HOH	324	15.415	4.434	85.045	1.00	55.66			O
ANISOU	2708	O	HOH	324	7140	7025	6984	63	-43	21		O
HETATM	2709	O	HOH	326	16.129	6.582	72.587	1.00	49.49			O
ANISOU	2709	O	HOH	326	6188	6233	6383	168	0	-78		O
HETATM	2710	O	HOH	327	33.441	36.723	62.911	1.00	55.80			O
ANISOU	2710	O	HOH	327	7211	7012	6980	-43	8	61		O
HETATM	2711	O	HOH	330	-0.292	24.854	78.344	1.00	56.12			O
ANISOU	2711	O	HOH	330	7181	7159	6983	58	-61	63		O
HETATM	2712	O	HOH	331	-2.262	16.030	67.431	1.00	43.84			O
ANISOU	2712	O	HOH	331	5600	5401	5657	-48	-107	-143		O
HETATM	2713	O	HOH	332	3.329	33.043	78.532	1.00	49.89			O
ANISOU	2713	O	HOH	332	6511	6227	6216	58	99	-24		O
HETATM	2714	O	HOH	335	15.236	11.644	43.279	1.00	45.72			O
ANISOU	2714	O	HOH	335	5693	5772	5905	95	33	-36		O
HETATM	2715	O	HOH	336	5.226	24.476	44.257	1.00	46.11			O
ANISOU	2715	O	HOH	336	5835	6003	5682	-2	47	52		O
HETATM	2716	O	HOH	338	37.716	19.152	63.872	1.00	47.85			O
ANISOU	2716	O	HOH	338	6149	5815	6217	-10	83	-36		O
HETATM	2717	O	HOH	340	-0.279	14.811	65.962	1.00	55.82			O
ANISOU	2717	O	HOH	340	7087	7100	7020	49	-30	-30		O
HETATM	2718	O	HOH	341	17.272	10.150	42.135	1.00	46.09			O
ANISOU	2718	O	HOH	341	5845	5850	5817	-109	-6	3		O
HETATM	2719	O	HOH	342	33.731	21.964	59.151	1.00	48.16			O
ANISOU	2719	O	HOH	342	6050	6261	5987	-82	99	-143		O
HETATM	2720	O	HOH	343	3.315	13.263	67.070	1.00	54.80			O
ANISOU	2720	O	HOH	343	6862	6874	7087	-87	87	-19		O
HETATM	2721	O	HOH	344	9.552	29.955	43.445	1.00	47.43			O
ANISOU	2721	O	HOH	344	6003	5977	6040	39	-96	-3		O
HETATM	2722	O	HOH	345	31.518	37.945	65.887	1.00	47.47			O
ANISOU	2722	O	HOH	345	6008	5995	6035	-80	135	28		O
HETATM	2723	O	HOH	347	11.233	7.838	64.305	1.00	53.52			O
ANISOU	2723	O	HOH	347	6849	6681	6806	53	-13	-110		O
HETATM	2724	O	HOH	350	13.328	38.241	87.887	1.00	47.64			O
ANISOU	2724	O	HOH	350	5962	5927	6213	-116	46	-19		O
HETATM	2725	O	HOH	351	25.523	36.758	93.170	1.00	60.03			O
ANISOU	2725	O	HOH	351	7656	7563	7589	-5	13	29		O
HETATM	2726	O	HOH	352	26.921	40.234	91.104	1.00	51.06			O
ANISOU	2726	O	HOH	352	6818	5989	6592	-117	-54	15		O
HETATM	2727	O	HOH	353	13.055	2.690	69.900	1.00	62.11			O
ANISOU	2727	O	HOH	353	7940	7809	7849	21	-46	-47		O
HETATM	2728	O	HOH	355	2.495	34.790	83.626	1.00	48.14			O
ANISOU	2728	O	HOH	355	6003	5987	6301	77	-181	11		O
HETATM	2729	O	HOH	357	8.408	13.997	61.499	1.00	47.34			O
ANISOU	2729	O	HOH	357	6049	5853	6087	-82	27	-128		O
HETATM	2730	O	HOH	358	17.978	9.188	71.905	1.00	59.37			O
ANISOU	2730	O	HOH	358	7436	7550	7574	47	-55	-21		O
HETATM	2731	O	HOH	359	25.220	24.855	47.581	1.00	56.34			O
ANISOU	2731	O	HOH	359	7003	7178	7226	-35	49	48		O

HETATM	2732	O	HOH	360	8.365	39.797	52.554	1.00	57.70			O
ANISOU	2732	O	HOH	360	7369	7257	7299	24	14	30		O
HETATM	2733	O	HOH	362	8.453	6.194	85.366	1.00	43.29			O
ANISOU	2733	O	HOH	362	5448	5321	5681	-170	22	39		O
HETATM	2734	O	HOH	364	3.892	23.307	62.053	1.00	52.89			O
ANISOU	2734	O	HOH	364	6740	6637	6718	13	-39	-1		O
HETATM	2735	O	HOH	365	22.092	41.480	85.519	1.00	59.49			O
ANISOU	2735	O	HOH	365	7576	7466	7560	-20	-9	-41		O
HETATM	2736	O	HOH	366	14.864	41.955	74.200	1.00	52.35			O
ANISOU	2736	O	HOH	366	6698	6451	6742	35	3	6		O
HETATM	2737	O	HOH	367	3.269	23.566	51.675	1.00	54.55			O
ANISOU	2737	O	HOH	367	6765	6914	7048	39	-82	-15		O
HETATM	2738	O	HOH	369	7.946	3.294	79.018	1.00	48.66			O
ANISOU	2738	O	HOH	369	6277	5968	6242	-38	46	23		O
HETATM	2739	O	HOH	371	-5.312	7.469	77.838	1.00	56.64			O
ANISOU	2739	O	HOH	371	7159	7120	7242	-88	-16	44		O
HETATM	2740	O	HOH	372	12.502	34.453	69.116	1.00	50.93			O
ANISOU	2740	O	HOH	372	6395	6446	6509	39	-96	-23		O
HETATM	2741	O	HOH	373	23.748	29.185	56.362	1.00	51.90			O
ANISOU	2741	O	HOH	373	6496	6645	6580	42	77	20		O
HETATM	2742	O	HOH	374	25.326	36.263	68.141	1.00	45.43			O
ANISOU	2742	O	HOH	374	5757	5923	5580	50	35	159		O
HETATM	2743	O	HOH	375	4.034	36.060	89.188	1.00	52.68			O
ANISOU	2743	O	HOH	375	6664	6524	6830	108	32	-119		O
HETATM	2744	O	HOH	376	8.774	37.413	89.385	1.00	58.93			O
ANISOU	2744	O	HOH	376	7501	7465	7425	-42	34	-78		O
HETATM	2745	O	HOH	377	39.698	40.850	59.792	1.00	56.29			O
ANISOU	2745	O	HOH	377	7140	7108	7139	-63	16	-48		O
HETATM	2746	O	HOH	378	13.215	24.355	40.367	1.00	49.52			O
ANISOU	2746	O	HOH	378	6422	6371	6024	-84	96	147		O
HETATM	2747	O	HOH	380	20.951	39.755	83.302	1.00	54.05			O
ANISOU	2747	O	HOH	380	6742	6918	6877	8	-16	36		O
HETATM	2748	O	HOH	381	16.135	12.472	61.601	1.00	56.44			O
ANISOU	2748	O	HOH	381	7190	7125	7131	7	55	-11		O
HETATM	2749	O	HOH	382	21.722	14.220	67.972	1.00	63.83			O
ANISOU	2749	O	HOH	382	8090	8138	8024	-41	-10	16		O
HETATM	2750	O	HOH	384	6.011	11.185	67.542	1.00	57.41			O
ANISOU	2750	O	HOH	384	7324	7183	7305	45	-5	86		O
HETATM	2751	O	HOH	385	17.439	40.675	87.096	1.00	58.27			O
ANISOU	2751	O	HOH	385	7270	7407	7463	107	29	-36		O
HETATM	2752	O	HOH	386	45.716	33.327	69.519	1.00	49.83			O
ANISOU	2752	O	HOH	386	6362	6243	6329	-120	2	-24		O
HETATM	2753	O	HOH	394	14.879	4.605	70.173	1.00	55.59			O
ANISOU	2753	O	HOH	394	7098	6966	7058	28	-55	68		O
HETATM	2754	O	HOH	396	9.997	11.781	91.683	1.00	57.00			O
ANISOU	2754	O	HOH	396	6965	7380	7314	-10	-7	-10		O
HETATM	2755	O	HOH	398	0.496	16.727	50.862	1.00	58.43			O
ANISOU	2755	O	HOH	398	7313	7415	7474	-20	-5	-24		O
HETATM	2756	O	HOH	399	2.187	20.776	54.264	1.00	51.45			O
ANISOU	2756	O	HOH	399	6482	6690	6376	-10	91	-100		O
HETATM	2757	O	HOH	400	31.245	20.318	56.035	1.00	54.12			O
ANISOU	2757	O	HOH	400	6761	7015	6787	-19	-21	-87		O
HETATM	2758	O	HOH	401	3.637	13.527	60.726	1.00	64.33			O
ANISOU	2758	O	HOH	401	8139	8215	8087	-60	-19	-6		O
HETATM	2759	O	HOH	403	3.546	4.378	70.862	1.00	61.55			O
ANISOU	2759	O	HOH	403	7951	7653	7782	-64	16	-30		O
HETATM	2760	O	HOH	413	41.302	18.266	82.469	1.00	51.62			O
ANISOU	2760	O	HOH	413	6539	6611	6463	67	-113	-36		O
HETATM	2761	O	HOH	414	37.305	36.992	70.772	1.00	55.58			O
ANISOU	2761	O	HOH	414	7055	7074	6990	-12	73	29		O
HETATM	2762	O	HOH	416	-0.907	21.900	85.346	1.00	41.86			O
ANISOU	2762	O	HOH	416	5163	5398	5342	49	72	5		O
HETATM	2763	O	HOH	417	6.864	32.422	79.415	1.00	52.77			O
ANISOU	2763	O	HOH	417	6687	6550	6815	172	-1	17		O

HETATM	2764	O	HOH	418	7.481	39.091	75.571	1.00	59.45				O
ANISOU	2764	O	HOH	418	7482	7522	7584	0	0	-13			O
HETATM	2765	O	HOH	419	27.524	39.365	73.684	1.00	25.45				O
ANISOU	2765	O	HOH	419	2857	3298	3514	-125	281	584			O
HETATM	2766	O	HOH	420	-0.025	28.677	90.592	1.00	65.13				O
ANISOU	2766	O	HOH	420	8228	8291	8227	-27	90	-41			O
HETATM	2767	O	HOH	425	40.888	16.331	73.180	1.00	61.78				O
ANISOU	2767	O	HOH	425	7832	7717	7926	9	-4	26			O
HETATM	2768	O	HOH	426	28.444	41.518	73.525	1.00	37.04				O
ANISOU	2768	O	HOH	426	4734	4158	5182	-53	20	-25			O
HETATM	2769	O	HOH	427	16.016	3.824	82.316	1.00	57.82				O
ANISOU	2769	O	HOH	427	7247	7319	7403	-26	-41	16			O
HETATM	2770	O	HOH	428	23.420	41.821	73.723	1.00	45.39				O
ANISOU	2770	O	HOH	428	5489	5889	5866	-26	-7	109			O
HETATM	2771	O	HOH	429	12.812	4.190	66.701	1.00	59.20				O
ANISOU	2771	O	HOH	429	7463	7442	7588	-30	30	2			O
HETATM	2772	O	HOH	430	6.360	35.019	76.713	1.00	59.09				O
ANISOU	2772	O	HOH	430	7361	7558	7532	-11	1	-48			O
HETATM	2773	O	HOH	432	4.119	32.067	92.209	1.00	51.99				O
ANISOU	2773	O	HOH	432	6557	6663	6534	4	80	-80			O
HETATM	2774	O	HOH	437	6.623	12.969	48.482	1.00	56.87				O
ANISOU	2774	O	HOH	437	7364	7116	7127	44	-1	-48			O
HETATM	2775	O	HOH	440	12.750	40.608	70.163	1.00	55.18				O
ANISOU	2775	O	HOH	440	6954	6998	7015	28	47	-23			O
HETATM	2776	O	HOH	441	7.126	2.530	67.794	1.00	59.18				O
ANISOU	2776	O	HOH	441	7546	7460	7480	-61	-36	-48			O
HETATM	2777	O	HOH	443	46.670	25.492	68.517	1.00	61.08				O
ANISOU	2777	O	HOH	443	7683	7754	7769	27	72	13			O
HETATM	2778	O	HOH	445	6.871	30.879	95.965	1.00	55.71				O
ANISOU	2778	O	HOH	445	7018	7146	7002	12	-10	46			O
HETATM	2779	O	HOH	451	15.622	12.679	58.773	1.00	61.40				O
ANISOU	2779	O	HOH	451	7791	7823	7716	9	-88	-11			O
HETATM	2780	O	HOH	452	25.689	28.519	54.413	1.00	62.21				O
ANISOU	2780	O	HOH	452	7785	7966	7887	-41	14	26			O
HETATM	2781	O	HOH	457	41.314	16.986	88.613	1.00	48.52				O
ANISOU	2781	O	HOH	457	6011	6194	6231	92	5	47			O
HETATM	2782	O	HOH	465	24.829	40.922	69.886	1.00	44.56				O
ANISOU	2782	O	HOH	465	5771	5485	5673	12	15	34			O
HETATM	2783	O	HOH	467	6.762	36.046	61.809	1.00	56.72				O
ANISOU	2783	O	HOH	467	7186	7159	7205	4	3	8			O
HETATM	2784	O	HOH	472	11.158	39.890	87.944	1.00	57.13				O
ANISOU	2784	O	HOH	472	7284	7170	7253	-3	28	31			O
HETATM	2785	O	HOH	473	31.538	12.268	75.175	1.00	51.92				O
ANISOU	2785	O	HOH	473	6705	6525	6496	-25	51	-14			O
HETATM	2786	O	HOH	476	26.979	13.822	60.648	1.00	42.36				O
ANISOU	2786	O	HOH	476	5511	5199	5384	9	105	7			O
HETATM	2787	O	HOH	477	21.273	37.456	63.586	1.00	54.55				O
ANISOU	2787	O	HOH	477	6835	6933	6957	-34	40	48			O
HETATM	2788	O	HOH	481	20.412	35.837	50.187	1.00	51.97				O
ANISOU	2788	O	HOH	481	6452	6741	6555	-93	48	2			O
HETATM	2789	O	HOH	482	39.521	42.897	65.639	1.00	58.39				O
ANISOU	2789	O	HOH	482	7504	7396	7285	-33	69	-7			O
HETATM	2790	O	HOH	483	24.823	8.540	69.442	1.00	59.90				O
ANISOU	2790	O	HOH	483	7700	7472	7588	-65	-2	3			O
HETATM	2791	O	HOH	487	5.944	34.999	92.476	1.00	56.11				O
ANISOU	2791	O	HOH	487	7054	7203	7062	-16	42	-19			O
HETATM	2792	O	HOH	488	37.642	14.987	63.395	1.00	47.50				O
ANISOU	2792	O	HOH	488	5941	5990	6117	98	102	-11			O
HETATM	2793	O	HOH	489	41.015	38.881	64.470	1.00	55.54				O
ANISOU	2793	O	HOH	489	7016	6923	7165	-8	23	-31			O
HETATM	2794	O	HOH	491	32.734	18.593	58.165	1.00	53.69				O
ANISOU	2794	O	HOH	491	6728	6899	6773	47	-24	-98			O
HETATM	2795	O	HOH	493	8.740	7.839	89.511	1.00	58.03				O
ANISOU	2795	O	HOH	493	7350	7327	7372	-11	-45	70			O

HETATM	2796	O	HOH	495	23.604	25.929	44.812	1.00	56.41		O
ANISOU	2796	O	HOH	495	7030	7253	7153	98	63	-21	O
HETATM	2797	O	HOH	500	0.474	27.705	86.600	1.00	48.77		O
ANISOU	2797	O	HOH	500	6246	6507	5777	331	-175	-101	O
HETATM	2798	O	HOH	504	25.631	32.751	48.064	1.00	65.67		O
ANISOU	2798	O	HOH	504	8285	8326	8342	-8	25	18	O
HETATM	2799	O	HOH	506	19.513	4.664	81.284	1.00	62.16		O
ANISOU	2799	O	HOH	506	7807	7850	7961	-7	-67	-14	O
HETATM	2800	O	HOH	509	21.454	17.148	40.997	1.00	56.69		O
ANISOU	2800	O	HOH	509	6992	7285	7262	26	-33	3	O
HETATM	2801	O	HOH	514	18.388	40.807	69.422	1.00	59.00		O
ANISOU	2801	O	HOH	514	7435	7516	7467	9	-10	19	O
HETATM	2802	O	HOH	515	8.190	38.470	57.852	1.00	59.17		O
ANISOU	2802	O	HOH	515	7415	7446	7622	-3	-72	88	O
HETATM	2803	O	HOH	517	43.777	32.298	64.059	1.00	61.31		O
ANISOU	2803	O	HOH	517	7705	7778	7813	-33	72	75	O
HETATM	2804	O	HOH	519	25.135	36.655	71.139	1.00	50.29		O
ANISOU	2804	O	HOH	519	6713	6286	6111	241	-9	45	O
HETATM	2805	O	HOH	522	16.923	7.483	41.655	1.00	52.27		O
ANISOU	2805	O	HOH	522	6598	6563	6700	-41	48	-17	O
HETATM	2806	O	HOH	523	11.324	2.417	78.141	1.00	62.13		O
ANISOU	2806	O	HOH	523	7828	7925	7853	21	21	50	O
HETATM	2807	O	HOH	526	33.616	13.704	92.622	1.00	52.56		O
ANISOU	2807	O	HOH	526	6856	6504	6609	2	-19	32	O
HETATM	2808	O	HOH	530	40.594	19.720	85.115	1.00	59.54		O
ANISOU	2808	O	HOH	530	7343	7643	7637	6	-50	2	O
HETATM	2809	O	HOH	532	15.076	31.487	94.187	1.00	54.80		O
ANISOU	2809	O	HOH	532	6794	7049	6979	-22	16	3	O
HETATM	2810	O	HOH	533	29.531	25.159	95.169	1.00	60.30		O
ANISOU	2810	O	HOH	533	7650	7631	7631	-35	-35	34	O
HETATM	2811	O	HOH	537	28.865	20.427	53.190	1.00	61.62		O
ANISOU	2811	O	HOH	537	7694	7884	7833	7	63	7	O
HETATM	2812	O	HOH	540	3.488	19.765	56.474	1.00	55.51		O
ANISOU	2812	O	HOH	540	6849	7169	7075	77	1	13	O
HETATM	2813	O	HOH	544	1.976	26.521	93.596	1.00	55.30		O
ANISOU	2813	O	HOH	544	6950	7025	7035	50	74	42	O
HETATM	2814	O	HOH	545	6.232	26.717	42.963	1.00	61.67		O
ANISOU	2814	O	HOH	545	7843	7854	7736	41	-36	-18	O
HETATM	2815	O	HOH	547	15.978	43.004	78.376	1.00	54.93		O
ANISOU	2815	O	HOH	547	6775	6976	7120	29	-47	-37	O
HETATM	2816	O	HOH	552	23.478	11.461	69.512	1.00	48.39		O
ANISOU	2816	O	HOH	552	6368	5943	6074	34	34	-38	O
HETATM	2817	O	HOH	564	31.768	13.802	72.785	1.00	50.67		O
ANISOU	2817	O	HOH	564	6430	6380	6444	37	-36	-82	O
HETATM	2818	O	HOH	565	43.097	17.088	70.385	1.00	48.92		O
ANISOU	2818	O	HOH	565	6012	6253	6323	209	41	-81	O
HETATM	2819	O	HOH	578	25.824	12.068	89.747	1.00	49.43		O
ANISOU	2819	O	HOH	578	6241	6143	6397	115	23	18	O
HETATM	2820	O	HOH	579	13.391	34.227	97.272	1.00	63.68		O
ANISOU	2820	O	HOH	579	8088	8000	8106	-32	0	-28	O
HETATM	2821	O	HOH	583	16.532	18.164	87.980	1.00	51.16		O
ANISOU	2821	O	HOH	583	6539	6406	6493	-38	73	105	O
HETATM	2822	O	HOH	591	24.443	15.964	52.058	1.00	50.29		O
ANISOU	2822	O	HOH	591	6313	6394	6401	-2	10	8	O
HETATM	2823	O	HOH	592	11.355	36.376	65.514	1.00	52.43		O
ANISOU	2823	O	HOH	592	6660	6474	6786	67	-21	4	O
HETATM	2824	O	HOH	593	37.256	22.800	90.212	1.00	43.47		O
ANISOU	2824	O	HOH	593	5247	5701	5566	-27	-83	130	O
HETATM	2825	O	HOH	600	18.701	9.992	44.274	1.00	55.16		O
ANISOU	2825	O	HOH	600	6999	7033	6926	47	14	-113	O
HETATM	2826	O	HOH	615	25.210	19.141	47.805	1.00	57.78		O
ANISOU	2826	O	HOH	615	7249	7324	7380	79	76	19	O
HETATM	2827	O	HOH	616	22.084	11.729	51.994	1.00	58.99		O
ANISOU	2827	O	HOH	616	7480	7441	7493	60	2	-88	O

090504 08:17:04

HETATM	2828	O	HOH	619	41.178	27.721	77.339	1.00	37.71				O
ANISOU	2828	O	HOH	619	4854	4339	5135	298	-117	-214			O
HETATM	2829	O	HOH	623	-1.197	26.206	72.921	1.00	53.43				O
ANISOU	2829	O	HOH	623	6708	6883	6709	-27	2	75			O
HETATM	2830	O	HOH	624	45.484	20.006	82.208	1.00	56.64				O
ANISOU	2830	O	HOH	624	7255	7139	7127	-13	-7	17			O
HETATM	2831	O	HOH	627	11.143	-2.160	66.228	1.00	62.12				O
ANISOU	2831	O	HOH	627	7798	7880	7927	-33	-16	27			O
HETATM	2832	O	HOH	637	19.352	15.446	62.934	1.00	45.54				O
ANISOU	2832	O	HOH	637	5887	5559	5855	-40	-83	-140			O
HETATM	2833	O	HOH	640	-2.217	4.066	79.725	1.00	60.76				O
ANISOU	2833	O	HOH	640	7688	7739	7658	-42	5	28			O
HETATM	2834	O	HOH	657	10.956	43.002	53.601	1.00	48.01				O
ANISOU	2834	O	HOH	657	6210	5918	6113	93	1	-9			O
HETATM	2835	O	HOH	658	47.384	16.959	79.217	1.00	61.75				O
ANISOU	2835	O	HOH	658	7871	7747	7846	39	-30	17			O
HETATM	2836	O	HOH	663	11.745	36.372	72.089	1.00	61.47				O
ANISOU	2836	O	HOH	663	7726	7864	7766	23	-58	11			O
HETATM	2837	O	HOH	667	2.304	27.310	61.929	1.00	49.79				O
ANISOU	2837	O	HOH	667	6160	6349	6410	3	-16	125			O
HETATM	2838	O	HOH	669	23.828	39.012	67.662	1.00	52.84				O
ANISOU	2838	O	HOH	669	6570	6660	6846	-100	56	-17			O
HETATM	2839	O	HOH	673	11.087	47.504	65.109	1.00	62.37				O
ANISOU	2839	O	HOH	673	7841	7952	7907	-26	11	-13			O
HETATM	2840	O	HOH	676	14.238	10.438	50.818	1.00	62.35				O
ANISOU	2840	O	HOH	676	7984	7857	7850	9	20	-25			O
HETATM	2841	O	HOH	681	31.791	26.751	94.935	1.00	47.57				O
ANISOU	2841	O	HOH	681	6146	6031	5899	-95	-168	134			O
HETATM	2842	O	HOH	684	37.979	38.970	68.454	1.00	53.13				O
ANISOU	2842	O	HOH	684	6769	6666	6752	-117	121	-38			O
HETATM	2843	O	HOH	699	41.716	19.258	67.307	1.00	57.26				O
ANISOU	2843	O	HOH	699	7261	7338	7158	60	23	2			O
HETATM	2844	O	HOH	703	21.774	9.807	71.073	1.00	58.05				O
ANISOU	2844	O	HOH	703	7354	7235	7467	-65	-23	-4			O
HETATM	2845	O	HOH	708	17.768	41.625	80.761	1.00	57.03				O
ANISOU	2845	O	HOH	708	7218	7256	7196	62	37	-76			O
HETATM	2846	O	HOH	710	9.677	39.234	68.814	1.00	59.73				O
ANISOU	2846	O	HOH	710	7430	7620	7646	83	-10	12			O
HETATM	2847	O	HOH	713	15.316	17.548	35.927	1.00	53.94				O
ANISOU	2847	O	HOH	713	6916	6622	6956	-37	33	87			O
HETATM	2848	O	HOH	714	29.308	14.272	58.997	1.00	61.71				O
ANISOU	2848	O	HOH	714	7801	7844	7803	-2	-49	-38			O
HETATM	2849	O	HOH	718	39.719	18.245	89.381	1.00	58.93				O
ANISOU	2849	O	HOH	718	7550	7394	7446	20	-47	-26			O
HETATM	2850	O	HOH	745	40.826	15.163	70.694	1.00	62.25				O
ANISOU	2850	O	HOH	745	7927	7817	7908	40	-35	42			O
HETATM	2851	O	HOH	746	13.165	-0.800	71.540	1.00	60.38				O
ANISOU	2851	O	HOH	746	7607	7643	7692	25	29	-62			O
CONECT	1473	2417											
CONECT	2417	1473											
MASTER	331	0	0	13	12	0	0	6	2849	2	2	24	
END													

United States Patent & Trademark Office
Office of Initial Patent Examination

Application papers not suitable for publication

SN 09856247 Mail Date 05/17/01

- ☐ Non-English Specification
- ☐ Specification contains drawing(s) on page(s) _____ or table(s) _____
- ☐ Landscape orientation of text ☐ Specification ☐ Claims ☐ Abstract
- ☐ Handwritten ☐ Specification ☐ Claims ☐ Abstract
- ☐ More than one column ☐ Specification ☐ Claims ☐ Abstract
- ☐ Improper line spacing ☐ Specification ☐ Claims ☐ Abstract
- ☐ Claims not on separate page(s)
- ☐ Abstract not on separate page(s)
- ☐ Improper paper size -- Must be either A4 (21 cm x 29.7 cm) or 8-1/2"x 11"
- ☐ Specification page(s) _____ ☐ Abstract
- ☐ Drawing page(s) _____ ☐ Claim(s)
- ☐ Improper margins
- ☐ Specification page(s) _____ ☐ Abstract
- ☐ Drawing page(s) _____ ☐ Claim(s)
- ☐ Not reproducible Section
- Reason ☐ Specification page(s) _____
- ☐ Paper too thin ☒ Drawing page(s) only 1
- ☒ Glossy pages ☐ Abstract
- ☐ Non-white background ☐ Claim(s)
- ☐ Drawing objection(s)
- ☐ Missing lead lines, drawing(s) _____
- ☐ Line quality is too light, drawing(s) _____
- ☐ More than 1 drawing and not numbered correctly
- ☐ Non-English text, drawing(s) _____
- ☐ Excessive text, drawing(s) _____
- ☐ Photographs capable of illustration, drawing(s) _____

09856247-051701